

June 20, 2024

The Board of Trustees of Miami University and associated Committees will hold meetings on June 26, 27, and 28, 2024, as follows:

The Investment Subcommittee, Wednesday, June 26, 2024 in Marcum 112, beginning at 3:15 p.m.

Finance and Audit Committee, Thursday, June 27, 2024 in Marcum 180's, beginning at 9:00 a.m.

Academic and Student Affairs Committee, Thursday, June 27, 2024 in Marcum 180's, beginning at 1:00 p.m.

Meeting of the Full Board of Trustees, Friday, June 28, 2024 in Marcum 180's, beginning at 9:00 a.m.



T. O. Pickerill II
Secretary to the Board of Trustees

Miami University Board of Trustees
Marcum Conference Center, Room 180's, Oxford Campus
9:00 a.m. Friday, June 28, 2024

Call the Meeting to Order and Roll Call – Chair Mary Schell

Public Study Session

- Comments from the Public (if requested).
- Annual ICA Update, Athletic Director David Sayler
- MiamiTHRIVE, Special Assistant to the President Brent Shock

Public Business Session

- Approval of the Prior Meeting Minutes
- Consent Calendar
 - [Emerita and Emeriti](#)
 - [Award of Tenure, Liran Ma, Chair, Computer Science Engineering](#)
 - [Award of Tenure, Mohammad Mayyas, Engineering Technology](#)
- Comments by the Chair, Trustee Mary Schell
- Reports
 - Senate Report - Chair of the University Senate Executive Committee, Rosemary Pennington
 - Student Body President, Will Brinley
 - Miami President, Dr. Greg Crawford
- Committee Presentations and Resolutions
 - Academic and Student Affairs, Trustee Ryan Burgess
 - Finance and Audit, National Trustee Mark Sullivan
- Resolutions and Ordinances
 - [FY2025 Budget Ordinance](#)
 - City of Oxford Fire/EMS and Economic Development Agreements (No Attachment)
 - [Advanced Manufacturing Hub Renovation](#)
 - [McGuffy Roof Replacement](#)
- Student Trustee Reports
- Other Business (as required)
 - [Appointment of Richard McVey as a National Trustee](#)

Executive Session

- Consult with Counsel
- Pending Litigation
- Matters Required to be Kept Confidential – Trade Secrets
- Preparing for Negotiations with Public Employees
- Personnel Matters, Duties and Responsibilities, and Recognition
- Purchase or Sale of Property

Return to Public Session

- Other Business (as required)

Adjourn

Written Reports and Other Material

- [OTIE June Newsletter](#)

June 28, 2024
Consent Calendar

RESOLUTION R2024-xx

BE IT RESOLVED, that the Board of Trustees hereby approves the following for the rank of Professor Emerita effective on the formal date of retirement:

Elizabeth Bergman

German, Russian, Asian & Middle Eastern Languages and Cultures

Kelly Brunarski

Finance

Ann Hagerman

Chemistry

Laura Neack

Political Science

Kate Rousamaniere

Educational Leadership

Diana Royer

Languages, Literature & Writing

Leslie Stoel

Marketing

BE IT RESOLVED, that the Board of Trustees hereby approves the following for the rank of Professor Emeritus effective on the formal date of retirement:

Sheldon Anderson

History

Matthew Gordon

History

Benjamin Gung

Chemistry

Howard Kleiman

Media, Journalism, and Film

Christopher Myers

Biology

Gary Speck
Music

Jack Vaughn
Biology

BE IT RESOLVED, that the Board of Trustees hereby approves the following for the rank of Administrator Emerita effective on the formal date of retirement:

Lynne Myers
Biology

Martha Weber
Provost, Undergraduate Research

BE IT FURTHER RESOLVED, that the Board of Trustees hereby approves the following for the rank of Administrator Emeritus effective on the formal date of retirement:

Steven Baker
Assistant Athletic Director Broadcasting

Clark Kelly
College of Engineering and Computing

Gary Kraft
Pay and Retirement Coordinator

Timothy Viezer
Director of Investments

June 28, 2024
Consent Calendar

RESOLUTION R2024-xx

BE IT RESOLVED, that the Board of Trustees hereby approves the award of tenure to the following new faculty member, effective at the start of their appointment:

Liran Ma
Chair
Computer Science Engineering

Liran Ma, D.Sc.

Email: liranma@gmail.com • Mobile: 571-212-7612 • Web: <http://csfaculty.tcu.edu/ma/>

EDUCATION

- D.Sc., Computer Science, The George Washington University 2008

ACADEMIC APPOINTMENTS

- Professor, Texas Christian University, Fort Worth, TX 05/2021 - Present
- Associate Professor, Texas Christian University, Fort Worth, TX 06/2015 - 05/2021
- Assistant Professor, Texas Christian University, Fort Worth, TX 08/2010 - 05/2015
- Assistant Professor, Michigan Technological University, Houghton, MI 08/2008 - 06/2010

RESEARCH INTERESTS

My current research interests span the intricate intersections of cybersecurity, artificial intelligence (AI), and education materials and effective delivery technologies for these two evolving fields. My work aims to not only fortify the security landscape and advance AI technologies but also explore how these innovations can be harnessed to enhance and revolutionize practices in diverse domains such as education, social and behavior sciences, and healthcare.

EXTRAMURAL GRANTS

In Progress

- NSF, SaTC: EDU, “Fire and ICE: Raising Security Awareness through Experiential Learning Activities for Building Trustworthy Deep Learning-based Applications”, PI, Total amount: \$500,000.00 (TCU portion: \$220,000.00)

Completed

- NSF, SaTC: EDU, “Advancing Cybersecurity Learning Through Inquiry-based Laboratories on a Container-based Virtualization Platform”, PI, Total amount: \$500,000.00 (TCU portion: \$150,000.00)
- NSF, CyberTraining, “Enhancing Mobile Security Education by Creating *Eureka* Experiences”, Lead-PI, Total amount: \$500,000.00 (TCU portion: \$250,000.00)
- NSF, EAGER, “A Social and Context Aware Spectrum Management Framework for Heterogeneous Cognitive Radio Networks”, PI, Total amount: \$128,426.00

COURSE TAUGHT

- Computer and Network Security
- Wireless Networking and Security
- Database Systems
- Unix/Linux System Admin
- Adv. System and Network Admin
- Intro to Python for Data Analytics

Leadership Role

- Lead Planner and Builder of AI Institute:** Developing a strategic vision for the AI institute. Identifying key areas for research and education, and collaborating with colleagues across different disciplines to define goals, timelines, and resource requirements. 2022-Present
- Initiator and Creator of Data Science Program:** Led efforts in the creation of a B.S. degree in Data Science (DS), spearheading all aspects from inception to successful implementation. 2018-2020

SELECTED PUBLICATIONS

Journal Papers

- Tianhui Zhang, Yan Huo, Qinghe Gao, [Liran Ma](#), Yue Wu, Rayna Li, “Cooperative Physical Layer Authentication with Reputation-inspired Collaborator Selection,” *IEEE Internet of Things Journal*, Aug. 2023.
- Jian Mao, Qixiao Lin, Shishi Zhu, [Liran Ma](#), Jianwei Liu, “SMARTTRACER: Anomaly-driven Provenance Analysis based on Device Correlation in Smart Home Systems,” *IEEE Internet of Things Journal*, Aug. 2023.

3. Tianhui Zhang, Yan Huo, Liran Ma, Ela Guo, "Distributed Physical Layer Authentication: Overview and Opportunities," *IEEE Communications Magazine*, April 2023.
4. Jian Mao, Xiaohu Xu, Qixiao Lin, Liran Ma, Jianwei Liu, "EScope: Effective Event Validation for IoT Systems based on State Correlation," *Big Data Mining and Analytics*, Vol. 6, Issue 2, Jan. 2023.
5. Jialing He, Zijian Zhang, Liran Ma, Zhouyu Zhang, Meng Li, Bakh Khoussainov, Jiamou Liu, Liehuang Zhu, "InFocus: Amplifying Critical Feature Influence on Non-Intrusive Load Monitoring through Self-Attention Mechanisms," *IEEE Transactions on Smart Grid*, Jan. 2023.
6. Hao Yin, Zijian Zhang, Jialing He, Liran Ma, Liehuang Zhu, Meng Li, and Bakh Khoussainov, "Proof of Continuous Work for Reliable Data Storage over Permissionless Blockchain," *IEEE Internet of Things Journal*, Vol. 9, Issue 10, May 2022, pp. 7866-7875.
7. Jialing He, Zijian Zhang, Jian Mao, Liran Ma, Bakh Khoussainov, Rui Jin, and Liehuang Zhu, "Video Aficionado: We Know What You Are Watching," *IEEE Transactions on Mobile Computing*, Vol. 21, Issue 8, Aug. 2022, pp. 3041-3052.
8. Shengling Wang, Weiman Sun, Liran Ma, Weifeng Lv, and Xiuzhen Cheng, "Quantum Game Analysis on Extrinsic Incentive Mechanisms for P2P Services," *IEEE Transactions on Parallel and Distributed Systems*, Vol. 31, Issue 1, Jan. 2020, pp. 159-170.
9. Qinghe Gao, Yan Huo, Tao Jing, Liran Ma, Yingkun Wen, and Xiaoshuang Xing, "An Intermittent Cooperative Jamming Strategy for Securing Energy-constrained Networks," *IEEE Transactions on Communications*, Vol. 67, Issue 11, Nov. 2019, pp. 7715-7726.
10. Qin Hu, Shengling Wang, Xiuzhen Cheng, Liran Ma, and Rongfang Bie, "Solving the Crowdsourcing Dilemma Using the Zero-Determinant Strategies," *IEEE Transactions on Information Forensics & Security*, Vol. 15, Oct. 2019, pp. 1778 - 1789.
11. Yue Wu, Fan Li, Liran Ma, Yadong Xie, Ting Li, and Yu Wang, "A Context-Aware Multi-Armed Bandit Incentive Mechanism for Mobile Crowd Sensing Systems," *IEEE Internet of Things Journal*, Vol. 6, Issue 5, Oct. 2019, pp. 7648-7658.
12. Xin Fan, Yan Huo, Liran Ma, Xiuzhen Cheng, Zhi Tian, and Dechang Chen, "Secure Communications in Tiered 5G Wireless Networks with Cooperative Jamming," *IEEE Transactions on Wireless Communications*, Vol. 18, Issue 6, June 2019, pp. 3265-3280.
13. Yingkun Wen, Yan Huo, Liran Ma, Tao Jing, and Qinghe Gao, "A Scheme for Trustworthy Friendly Jammer Selection in Cooperative Cognitive Radio Networks," *IEEE Transactions on Vehicular Technology*, Vol. 68, Issue 4, April 2019, pp. 3500-3512.
14. Yan Huo, Yuqi Tian, Liran Ma, Xiuzhen Cheng, and Tao Jing, "Jamming Strategies for Physical Layer Security," *IEEE Wireless Communications*, Vol. 25, Issue 1, Feb. 2018, pp. 148-153.
15. Yan Huo, Lingling Liu, Liran Ma, Wei Zhou, Xiuzhen Cheng, Tao Jing, and Xiaobing Jiang "A Coalition Formation Game based Relay Selection Scheme for Cooperative Cognitive Radio Networks," *ACM/Springer Wireless Networks*, 2016, pp. 1-12.
16. Yuan Le, Liran Ma, Wei Cheng, Xiuzhen Cheng, and Biao Chen, "A Time Fairness Based MAC Algorithm for Throughput Maximization in 802.11 Networks," *IEEE Transactions on Computers*, Vol. 64, No. 1, Jan 2015, pp. 19-31.
17. Amin Y. Teymorian, Wei Cheng, Liran Ma, Xiuzhen Cheng, Xicheng Lu, and Zexin Lu, "3D Underwater Sensor Network Localization," *IEEE Transactions on Mobile Computing*, Vol. 8, Dec. 2009, pp. 1610-1621.
18. Yanxia Rong, Amin Y. Teymorian, Liran Ma, Xiuzhen Cheng, and Hyeon-Ah Choi, "A Novel Rate Adaptation Scheme for 802.11 Networks," *IEEE Transactions on Wireless Communications*, Vol. 8, No. 2, Feb. 2009, pp. 862-870.
19. Fang Liu, Xiuzhen Cheng, Liran Ma, and Kai Xing, "SBK: A Self-Configuring Framework for Bootstrapping Keys in Sensor Networks," *IEEE Transactions on Mobile Computing*, Vol. 7, No. 7, July 2008, pp. 858-868.
20. Liran Ma, Qian Zhang, and Xiuzhen Cheng, "A Dynamic Interference and Power Aware Routing Protocol for Dense Multi-hop Wireless Networks," *ACM/Springer Wireless Networks (WINET)*, Vol 14 (2), April 2008, pp. 247-257.

21. Liran Ma, Xiuzhen Cheng, Fang Liu, Major J. Rivera, and Fengguang An, “iPAK: An In-Situ Pairwise Key Bootstrapping Scheme for Wireless Sensor Networks,” *IEEE Transactions on Parallel and Distributed Systems*, Volume 18, NO. 8, Aug. 2007, pp. 1174-1184.

Conference Papers

1. Lipei Liu, Jian Mao, Jiawei Li, Qixiao Lin, and Liran Ma, “Decipher Your Scores: A GAN-based Method for Online Rating System Model Extraction,” *The 20th IEEE International Conference on Mobile Ad-Hoc and Smart Systems (MASS 2023)*, Toronto, Canada, Sep. 2023.
2. Yudi Zhou, Tao Jing, Yue Wu, Qinghe Gao, Yan Huo, and Liran Ma, “Enhanced Collaborative Physical Layer Authentication Through An Impression-Weighted Decisions Aggregation Scheme”, *2023 IEEE Global Communications Conference: Communication & Information Systems Security (Globecom 2023 CISS)*, Kuala Lumpur, Malaysia, Dec. 2023.
3. Ze-Li Dou, Liran Ma, Khiem Nguyen, and Kien X. Nguyen, “Paradox of AlphaZero: Strategic vs. Optimal Plays,” *The 39th IEEE International Performance Computing and Communications Conference (IPCCC’20)*, Austin, Texas, Nov. 2020.
4. Linyan Xu, Zhangjie Fu, and Liran Ma, “An Integrated UAV Platform for Real-Time and Efficient Environmental Monitoring,” *The 14th International Conference on Wireless Algorithms, Systems, and Applications (WASA’19)*, Honolulu, HI, June 2019.
5. Shengling Wang, Jianhui Huang, Luyun Li, Liran Ma, and Xiuzhen Cheng, “Quantum Game Analysis of Privacy-Leakage for Application Ecosystems,” *ACM MobiHoc’17*, Chennai, India, July 2017.
6. Qin Hu, Shengling Wang, Liran Ma, Rongfang Bie, and Xiuzhen Cheng, “Anti-Malicious Crowdsourcing Using the Zero-Determinant Strategy,” *IEEE ICDCS’17*, Atlanta, GA, June 2017.
7. Chunchi Liu, Shengling Wang, Liran Ma, Xiuzhen Cheng, Rongfang Bie, and Jiguo Yu, “Mechanism Design Games for Thwarting Malicious Behavior in Crowdsourcing,” *IEEE INFOCOM’17*, Atlanta, GA, May 2017.
8. Qinghe Gao, Yan Huo, Liran Ma, Xiaoshuang Xing, Xiuzhen Cheng, Tao Jing, and Hang Liu, “Optimal Stopping Theory based Jammer Selection for Securing Cooperative Cognitive Radio Networks,” *IEEE Globecom’16*, Washington, D.C., Dec. 2016.
9. Xiang Tian, Jiguo Yu, Liran Ma, Guangshun Li, and Xiuzhen Cheng, “Distributed Deterministic Broadcasting Algorithms under the SINR Model,” *IEEE INFOCOM’16*, San Francisco, CA, April 2016.
10. Bowu Zhang, Jinho Hwang, Liran Ma, and Timothy wood, “Towards Security-Aware Virtual Server Migration Optimization to the Cloud,” *The 12th IEEE International Conference on Autonomic Computing (ICAC’15)*, Grenoble, France, July 2015.
11. Yuan Le, Liran Ma, Wei Cheng, Xiuzhen Cheng, and Biao Chen, “Maximizing Throughput When Achieving Time Fairness in Multi-Rate Wireless LANs,” *IEEE INFOCOM’12*, Orlando, FL, USA, March 2012.
12. Liran Ma, “A Novel Free-Rider Detection Scheme for IEEE 802.11 Wireless Networks,” *IEEE GLOBECOM’11*, Dec. 2011.
13. Liran Ma, Amin Y. Teymorian, and Xiuzhen Cheng, “A Hybrid Rogue Access Point Protection Framework for Commodity Wi-Fi Networks,” *IEEE INFOCOM’08*, April 2008.
14. Wei Cheng, Amin Y. Teymorian, Liran Ma, Xiuzhen Cheng, Lu Xicheng, and Zexin Lu, “Underwater Localization in Sparse 3D Acoustic Sensor Networks,” *IEEE INFOCOM’08*, April 2008.
15. Liran Ma, Amin Y. Teymorian, and Xiuzhen Cheng, “Passive Listening and Intrusion Management in Commodity Wi-Fi Networks,” *IEEE GLOBECOM’07*, Nov. 2007.
16. Kai Xing, Xiuzhen Cheng, Liran Ma, and Qilian Liang, “Superimposed Code Based Channel Assignment in Multi-Radio Multi-Channel Wireless Mesh Networks,” *ACM MobiCom’07*, Sep. 2007.

SERVICES

Department Services

- **Advisory Committee Chair:** Developed a comprehensive and forward-thinking strategic plan for the Computer Science (CS) Department, enhanced the curriculum by integrating cutting-edge topics to ensure relevance and preparedness, fostered faculty-led research initiatives and promoted interdisciplinary collaborations. 2021-Present
- **Program Assessment Coordinator:** Successfully led the accreditation process (similar to ABET) for the CS Department programs (including three majors and three minors), surpassing quality standards and elevating the program's reputation. 2019-Present

University Services

- **College of Science and Engineering (CSE) Advisory Committee:** Reviewed and evaluated application materials and supporting documentation for tenure and promotion. 2019-2021
- **CSE Dean's Search Committee:** Actively participated as a valued member of the committee, contributing to the selection of a qualified candidate for the role of Dean in CSE. 2020-2021

Professional Services

- **Technical Program Committee (TPC) Co-Chair:** The 12th International Conference on Wireless Algorithms, Systems, and Applications, 2017.
- **TPC Member:** IEEE International Conference on Computer Communications (INFOCOM) 2010-2011, 2013-2017, and 2021-2024; IEEE International Conference on Distributed Computing Systems (ICDCS) 2019; IEEE International Performance Computing and Communications Conference (IPCCC) 2018; IEEE International Conference on Communications (ICC) 2010-2013, 2015, and 2016; IEEE Global Telecommunications Conference (GLOBECOM) 2010-2013, and 2016.

AWARDS

- **Best Paper Award,** The 50th IEEE Global Communications Conference (GLOBECOM) 2007

June 28, 2024
Consent Calendar

RESOLUTION R2024-xx

BE IT RESOLVED, that the Board of Trustees hereby approves the award of tenure to the following new faculty member, effective at the start of their appointment:

Mohammad Mayyas
Engineering Technology

Prof. Mohammad Mayyas, Ph.D.

Home: 730 Fox Ln. Holland OH. 43528. **e-mail:** mmayyas@bgsu.edu, **Cell:** 817-247-1205

Office: 213 Technology Building, School of Engineering, Bowling Green State University, Bowling Green, OH. 43403

Objective: Aiming for a leadership role where I can apply my 15 years of experience in academic leadership, emphasizing industry-relevant innovation in engineering education. Dedicated to fostering collaboration and upholding excellence in applied teaching and research.

I. Academic Degrees

- **Ph.D.** in Mechanical Engineering
University of Texas at Arlington, 2007
"Methodologies for Automated Microassessmnyl", Ph.D Dissertation, University of Texas at Arlington, Publisher: UMI, Ann Arbor, MI. Number 3310640, 308 pages. (2008).
- **Master of Science** in Mechanical Engineering
University of Texas at Arlington, 2004
"Wafer surface reconstruction and characterization for motion compensation in a femtosecond laser micromachining system", Master Thesis, University of Texas at Arlington, Publisher: UMI, Ann Arbor, MI. Number 1421283, 173 pages. (2004).
- **Bachelor of Science** in Mechanical Engineering, Industry Production
Jordan University of Science & Technology, 2001
"Development and Experimentation Solar Tracking Control System", Senior Design Project, Jordan University of Science and Technology, 2nd place winner presented to Jordan Engineering Association (2001).

II. Administrative and Leadership Positions

1. **Program Director and Founder, Robotics Engineering, 2021-present**
Bowling Green State University, School of Engineering
 - ☑ *Directed and founded robotics program, collaboratively creating curriculum in thrust areas like autonomous robotics, AI, biomedical technology, semiconductor manufacturing, dynamic and process control.*
 - ☑ *Secured capital equipment fundings over a \$1M and led the deployment of engineering curriculum facilities for BGSU main and Fireland's Campus in areas like advanced control, Automated material handling, electronics, and advanced manufacturing systems.*
 - ☑ *Played a pivotal role in leading faculty to restructure the college, culminating in the creation of a School of Engineering focused on various contemporary engineering disciplines.*
 - ☑ *Contributed to the development of the unit's policies on merit, tenure, and promotion, as well as the evaluation of tenure track and teaching faculty.*
2. **Program Director and Founder, Mechatronics Engineering Technology, 2013-present**
Bowling Green State University, Department of Eng. Technologies
 - ☑ *Directed and founded Mechatronics program, working in collaboration to develop specialized curriculum in thrust areas like Industrial robotics and process development in manufacturing.*

- ☑ *Secured capital equipment fundings over a \$1M and led the development of advanced training and workforce development facilities, specializing in e-factory (Industrial 4.0 robotics and automation), integrated and additive manufacturing, Fanuc training, and mobile collaborative robotics.*
- ☑ *Effectively leveraged industry relationships and successfully secured over a \$1M in in-kind donations from various prominent corporations.*
- ☑ *Oversaw academic budget management, encompassing fund allocation, compliance, cost control, financial planning, reporting, and risk management, while collaborating with research office and college to meet institutional goals.*
- ☑ *Effectively led searches and hired talented faculty members and offered faculty mentorship.*
- ☑ *Led summer camps and workshops, managed recruitment events, and oversaw multimedia marketing for promoting engineering and technology programs.*
- ☑ *Led faculty effectively in securing and renewing ABET accreditation for the Mechatronics Engineering Technology and Mechanical and Manufacturing Engineering programs.*
- ☑ *Collaborated with the school unit, faculty, and advising center to assist in student transfers, address degree plan concerns, and help develop graduation strategies for students.*
- ☑ *Conducted campaign tours and technology demonstrations for high-ranking state officials, industry leaders, collaborators, as well as student and family orientation.*
- ☑ *Assisted in advocating for the establishment of the Center of Advanced Manufacturing, in collaboration with Owens Community College and the University of Findlay.*
- ☑ *Collaborated with regional institutions to form a consortium focused on advanced manufacturing workforce development, representing Bowling Green State University in this initiative.*
- ☑ *Engage with corporate partners to garner support for corporate education, facilitate an industry advisory board program, and initiate collaborative research projects.*

3. Regional Director of BEST Robotics, 2015 – 2019

Falcon BEST Robotics Hub, Bowling Green State University

- ☑ *Successfully organized annual STEM competitions for middle and high schools, recruiting participation from 18+ schools across Ohio, Indiana, and Michigan.*
- ☑ *Managed staff, allocated resources, led marketing efforts, conducted recruitment, and secured sponsorships.*

4. Director of Robotics Division– Full time, 2011 – 2013

University of Texas Arlington Research Institute

- ☑ *Headed the robotics division at the research institution, working in partnership with university faculty and leading a team of research scientists, post-docs, interns, and both graduate and undergraduate researchers in projects centered on assistive robotics and device technology.*
- ☑ *Collaborated with research groups in both institutional and inter-institutional joint grant proposals and implementation, obtaining funding from a variety of agencies.*
- ☑ *Demonstrated leadership and fostered collaboration by partnering with private sector companies to establish a joint research program, effectively securing various stages of SBIR and STTR grant.*

- ☑ *Exercised a collaborative leadership approach with the administration and research team in developing a strategic plan focused on increasing research spending.*

III. Academic Positions

1. Full Professor, 2021 – Present

Associate Professor 2013 – 2021

Robotics Engineering | Mechatronics Engineering Technology
Bowling Green State University, School of Engineering

- ☑ *Developed and taught hands-on courses in areas like advanced industry robot systems.*
- ☑ *Secured over \$1M in external funding for STEM education and research.*
- ☑ *Supervised cross-disciplinary senior design projects for all engineering & technology programs.*
- ☑ *Supervised graduate students' theses and guided co-op students in industry.*
- ☑ *Granted tenure in 2019.*

2. Senior Research Scientist, 2011 – 2013

Faculty Associate of Research, 2009 – 2011

Research Associate (Post Doc), 2008 – 2009

University of Texas at Arlington Research Institute/ Automation & Robotics Research Institute,

- ☑ *Engaged in research and development of funded projects focused on Microelectromechanical Systems (MEMS), precision manufacturing techniques, medical devices, soft robotics, and novel mechanisms design and modeling.*
- ☑ *Contributed to the establishment of Texas Micro factory's modular cleanroom facilities and oversaw the training of equipment for both internal and external users.*
- ☑ *Created innovative solutions for complex engineering problems, including vibration-based chip release, distributed MEMS-assisted silicon wafer mechanical planarization, and regenerative medicine bioenvironmental devices.*

3. Special Faculty Member (Affiliate), 2009 – 2013

Associate Professor of Research (Affiliate), 2013 – 2016

University of Texas - Arlington, Mech. & Aerospace Dept.,

- ☑ *Sustained relationships to further enhance international collaborations, including the creation of MOUs, joint engineering programs, faculty exchanges, and sponsorship of doctoral students.*
- ☑ *Overseeing and mentoring graduate students.*

4. Visiting Assistant Professor, Summer 2009

Hashemite University, Mechatronics Engineering Dept.

- ☑ *Promoted collaborative research and educational partnerships between universities in Jordan and the University of Texas at Arlington.*

5. Graduate Research Associate, 2005 - 2007

Graduate Teaching Assistant, 2004 - 2005

Graduate Research Assistant, 2003 - 2004

University of Texas at Arlington- Auto. & Robo. Research Institute, and Mech. & Aerospace Dept.,

- ☑ *Assisted in various undergraduate courses, encompassing Applied Engineering Mathematics and the Design and Modeling of Mechatronics.*
- ☑ *Contributed to several engineering projects, including work in the Laser Micromachining Lab, Robotics (MARS) Laboratory, Hot Embossing Laboratory, and Cleanroom Facilities.*
- ☑ *Offered consulting to research groups in the field of multi-physical computation through finite element modeling.*

6. Graduate Teaching Assistant

Jordan University of Science & Technology, Mech. Eng. Dept., 2001 – 2002

- ☑ *Assisted in teaching the mechatronics and PLC laboratory and served as a teaching assistant for grading dynamics and vibration courses.*
- ☑ *Pursued a master's degree in mechanical engineering, specializing in Applied Engineering Mathematics.*

IV. Industry Positions

1. General Board member for Industry Council on Material Handling Education (CICMHE) – Volunteer

Material Handling Institute (MHI), USA, 2021-present

- ☑ *Coordinates the Student Day event for MODEX and PROMAT material handling and technology trade shows, attracting participation from over 300 students per year.*

2. Engineering Intern (Finite Element Developer) – Full time

Technology Center, Rhodia Engineering Plastic, Freiburg, Germany, 2000-2001

- ☑ *Conducted computational analysis for the design of engineered plastic injection components used in automotive engines, including those utilized today by Audi and BMW.*

3. Product Research and Development – Full time

Mayyas Pharmaceutical Inc., 1999 – 2002

- ☑ *Managed product packaging design and oversaw manufacturing sourcing, contributing to the successful marketing and launch of cosmetic and medical diagnostic device products.*

V. Technical Hands-on Skills

Robotics Equipment:

- **Industrial Robot Operation & Programming:** Expert in Mitsubishi and Fanuc systems.
- **Machine Vision:** Proficient in Cognex Insight and Deep Learning Cognex technologies.
- **Programmable Logic Control (PLC):** Specialized in Allen-Bradley ControlLogix, and MicroLogix systems.
- **Industrial Automation Design & Integration:** Skilled in integrating PLCs, HMIs, sensors, actuators, Cognex cameras, Sick LiDAR, and robotics.

- **Automated Guided Mobile Vehicles:** Experienced in navigation and manipulation with ClearPath, Robotino, and Quanser systems.
- **Collaborative Robots:** Proficient with Universal Robot systems.
- **Motion Capture Systems:** Skilled in Vicon motion capture technology.

3D Additive Manufacturing Equipment:

- **PolyJet Technology:** Experienced with Stratasys systems.
- **Metal Powder Bed Fusion Technology:** Specialized in Xact Metal technology.
- **Fused Deposition Modeling (FDM):** Proficient in Makerbot and FlashForge systems.
- **PCB Hybrid Technology:** Knowledgeable in BotFactory solutions.
- **Stereolithography (SLA):** Experienced with 3D Systems technology.

Characterization & Instrumentation Equipment:

- **Industrial X-ray/CT Scanning:** Expert in NIKON XTV160 systems.
- **X-ray Fluorescence:** Proficient with Hitachi technology.
- **Mechanical Testing Equipment:** Experienced with Shimadzu tensile, compression, fatigue testers, and Dage Series 4000 Bond Tester.
- **Electrical Systems Instrumentation:** Skilled in using oscilloscopes, signal generators, and NI-boards.
- **3D Dynamic Optical Profilometer:** Proficient in KLA Tencor MicroXAM – 100.
- **Gages:** Experienced with strain force, laser position, and 2D laser profilers.
- **Dynamic Thermal Imaging:** Skilled in FLIR technology.

General Cleanroom Equipment:

- **Photolithography Tools:** Experience with Mask Aligners, Spin Coaters, and Developers.
- **Etching Systems:** Experience with Wet Etching Stations, Dry Etchers, and Plasma Etchers.
- **Deposition Machinery:** Experience with CVD Systems and PVD Systems (sputtering).
- **Inspection & Metrology Instruments:** Experience with SEM, AFM, and Profilometers.
- **Cleaning & Surface Prep Tools:** Experienced with Ultrasonic Cleaners.
- **Dicing & Packaging Devices:** Experienced with Wafer Dicers (laser, saw, scraper), Wire Bonders, and Die Attach Equipment.
- **Environmental Control Systems:** Experienced with HEPA Filters and Temperature & Humidity Control.
- **Specialized Equipment:** Expert in laser micromachining (Excimer and Femtosecond) R&D, Furnaces, and Microscopes.
- **Customized systems:** 3D Micro assembly robotic stages.

Software Proficiencies:

- **FEM/CAD Modeling:** ANSYS Workbench, ANSYS APDL, SOLIDWORKS.
- **Programming:** MATLAB (Script, Simulink), LabView.
- **Embedded Systems:** Arduino.
- **Mechatronics Simulation:** Automation Studio, 20-Sim.
- **Robotics Software:** Fanuc Roboguide, Mitsubishi MELFA RTtoolbox, Studio 5000.

VI. Grants

Bowling Green State University (BGSU) Projects:

1. **Title:** *Next-Gen Engineering Excellence: Aligning Advanced Manufacturing Facilities with Future Skill Priorities in Ohio.*(RAPIDS 7.0)
 - **Awarded Amount:** \$764,558.53
 - **Funding Source:** Ohio Department of Higher Education (ODHE), RAPIDS
 - **Period:** 12/1/2023 – 12/1/2025

- **Team:** PI: Mohammad Mayyas, Co-PIs: MD Sarder, Mohammed Abouheaf, MD Za. Islam, Sri Kola, Sara Amar (Co-PI), Mikhail Shilov (Co-PI)
2. **Title:** *Advancing Regional Talent in Smart Tech-Enabled Manufacturing.*
 - **Funded by:** EDA Department of Commerce
 - **Award Amount:** \$332,828
 - **Period:** 2024-2026
 - **Team:** PI: MD Sarder, Co-PIs: Mohammad Mayyas, Za Islam
 3. **Title:** NSF-NSERC: Integrated Performance Optimization for Wind Energy Farms
 - **Requested Amount:** (BGSU: \$573,321), (Université de Moncton: \$241,060)
 - **Status:** Pending
 - **Funding Source:** NSF-EPCN
 - **Period:** 06/1/2024 – 05/1/2027
 - **Committed Person-Months Per Year (Summer):** 0.5
 - **Team:** BGSU (PI: Mohammad Abouheaf, Co-PIs: Mohammad Mayyas).(Université de Moncton, PI: Nabil Nahas)
 4. **Title:** *Collaborative Research: Revitalizing Manufacturing Education in the U.S. Industrial Heartland*
 - **Requested Amount:** \$550,000
 - **Status:** Pending
 - **Funding Source:** NSF-DRK12
 - **Period:** 06/1/2024 – 05/1/2027
 - **Committed Person-Months Per Year (Summer):** 0.5
 - **Team:** PI: MD Sarder, Co-PIs: Mohammad Mayyas, Phillip Weinsier, MD Za. Islam.
 5. **Title:** *Career Pathways in Smart Manufacturing and Logistics.*
 - **Requested Amount:** \$637,2007
 - **Status:** Pending
 - **Funding Source:** NSF-ATE
 - **Period:** 06/1/2025– 05/1/2028
 - **Committed Person-Months Per Year (Summer):** 1.0
 - **Team:** PI: MD Sarder, Co-PIs: Mohammad Mayyas, Mohammed Abouheaf, MD Za. Islam.
 6. **Title:** *Additive Metal Manufacturing for Advanced Training & Process Development (RAPIDS 6)*
 - **Funded by:** Ohio Department of Higher Education (ODHE), RAPIDS
 - **Award Amount:** \$213,296
 - **Period:** 2023-2025
 - **PI:** Mohammad Mayyas, Co-PIs: Dr. Zahabul Islam, Dr. Mohammed Abouheaf
 7. **Title:** *Advanced Additive Manufacturing: Destructive and Non-destructive Material Testing and Training (RAPIDS 5)*
 - **Funded by:** Ohio Department of Education (ODHE), RAPIDS
 - **Awarded Amount:** \$157,745
 - **Period:** 2023-2025
 - **PI:** Mohammad Mayyas, Co-PIs: Dr. Zahabul Islam, Dr. Mohammed Abouheaf
 8. **Title:** *Quality Design Process Training Based on the Implementation of Industrial Computed Tomography (CT) in Additive and Hybrid Manufacturing Technologies*
 - **Funded by:** Ohio Department of Higher Education (ODHE) RAPIDS, and internal match.
 - **Award Amount:** \$202,000
 - **Period:** 2022-2024
 - **PI:** Mohammad Mayyas
 9. **Title:** *Supply Chain Lead Time & Visibility Enhancement of GSW Manufacturing*
 - **Funded by:** GSW Manufacturing Inc.

- **Awarded Amount:** \$63,670
 - **Period:** Sept. 2022-Jan.2023
 - **PI:** MD Sarder, Co-PI: Mohammad Mayyas
- 10. Title:** *RET Site: Workforce Rebuild through Advanced Manufacturing Training of K-14 Educators*
- **Funded by:** NSF-RET
 - **Awarded Amount:** \$600,000
 - **Period:** 9/1/22 – 8/31/2025
 - **PI:** MD Sarder, Co-PIs: Mohammad Mayyas, Mohammed Abouheaf, Za Islam
- 11. Title:** *Ohio Robotics Advanced Training, Technical Assistance and Research Center*
- **Funded by:** a gift-in-kind of FANUC America Corporation
 - **Awarded Amount:** worth over \$320,000 FANUC CERT curriculum.
 - **Period:** 2020-2023
 - **PI:** Mohammad Mayyas
- 12. Title:** *Ohio Robotics Advanced Training, Technical Assistance and Research Center*
- **Funded by:** Ohio Capital Funds
 - **Awarded Amount:** \$250,000
 - **Period:** 2020-2023
 - **Technical Lead:** Mohammad Mayyas
- 13. Title:** *Automated Guided Vehicles for Smart-logistics and Safe Material Handling in Advanced Manufacturing and Warehouse Industries (RAPIDS 4.0)*
- **Funded by:** Ohio Department of Higher Education (ODHE) RAPIDS
 - **Awarded Amount:** \$147,345
 - **Period:** 2020-2022
 - **PI:** Mohammad Mayyas
- 14. Title:** *Additive Manufacturing Training Based on the Implementation of Material Jetting Technology for the Production of Precision and Multi-layered Material Objects (RAPIDS 3.0)*
- **Funded by:** Ohio Department of Higher Education (ODHE) RAPIDS
 - **Awarded Amount:** \$145,209
 - **Period:** 2018-2021
 - **PI:** Mohammad Mayyas
- 15. Title:** *Vision System Training Center*
- **Funded by:** a gift-in-kind of Cognex Corporation
 - **Awarded Amount:** \$70k of vision systems (10 units)
 - **Period:** 2018
 - **PI:** Mohammad Mayyas
- 16. Title:** *E-Factory: Cyber Manufacturing Workforce Development (RAPIDS 2.0)*
- **Funded by:** Ohio Department of Higher Education (ODHE) RAPIDS
 - **Awarded Amount:** \$394
 - **Period:** 2017-2020
 - **PI:** Mohammad Mayyas
- 17. Title:** *Advance Manufacturing Training Equipment: Mechatronics and Process Control Mobile Units (RAPIDS 1.0)*
- **Funded by:** Ohio Department of Higher Education (ODHE) RAPIDS
 - **Awarded Amount:** \$1000,000
 - **Period:** 2016-2019
 - **Muti-institutional PI's:** (Leading institution North West State Community College , PI: Todd Hernandez), and (BGSU, PI: Mohammad Mayyas).

18. Title: *Development of Robotics Facility*

- **Funded by:** a gift-in-kind of Rixan Associate Inc
- **Awarded Amount:** worth over \$1000,000 (10 basic Robot Cells).
- **Period:** 2015
- **Multiple:** Contact and technical lead: Mohammad Mayyas. Administration (Sara Zulch Smith- Capital Campaign, Rodney Roger – Academic provost, Venu Dasigi – Interim Dean of CAATE).

19. Title: *Falcon BEST Robotics*

- **Funded by:** a gift-in-kind of First Solar
- **Awarded Amount:** \$15,000
- **Period:** 2016-2018
- **Event Lead:** Mohammad Mayyas. Capital Campaign: Sara Zulch Smith.

20. Title: *Falcon BEST Robotics*

- **Funded by:** a gift-in-kind of Lothrop
- **Awarded Amount:** \$15,000
- **Period:** 2016-2018
- **Event Lead:** Mohammad Mayyas. Capital Campaign: Sara Zulch Smith.

21. Title: *Falcon BEST Robotics*

- **Funded by:** BGSU foundation.
- **Awarded Amount:** \$2,000
- **Period:** 2016
- **Event Lead:** Mohammad Mayyas.

22. Title: *Establishment of Multi-scale Robotics Laboratory*

- **Funded by:** Start-up fund from office of research and College of Technology, Architecture and Applied Engineering
- **Awarded Amount:** \$20,000
- **Period:** 2014
- **PI:** Mohammad Mayyas

23. Title: *Project Kaleidoscope (PKAL) Conference, AAC&U's STEM higher education reform center*

- **Funded by:** NSF-SEA
- **Awarded Amount:** \$3500
- **Period:** 2017
- **PI:** Mohammad Mayyas

24. Title: *Finite Element Modeling Software, ANSYS – 50 educational seats*

- **Funded by:** Internal funding from BGSU Information Technology
- **Awarded Amount:** \$2400 Per Year
- **Period:** 2014- 2019
- **PI:** Mohammad Mayyas

25. Title: *Mechatronics Software, 20-sim – unlimited seats*

- **Funded by:** Internal funding from BGSU Information Technology/ and College of Technology, Architecture and Applied Engineering
- **Awarded Amount:** \$6000, and \$896 annual maintenance.
- **Period:** 2016-2022
- **PI:** Mohammad Mayyas

26. Title: *Characterization of 3D grasping mechanism*

- **Funded by:** BGSU-CURS program.
- **Awarded Amount:** \$500 material + \$200 Stipend.

- **Period:** 2016
- **Supervisor:** Mohammad Mayyas
- 27. Title:** *Characterization of smart skin sensor*
 - **Funded by:** BGSU-CURS program.
 - **Awarded Amount:** \$500 material + \$200 Stipend.
 - **Period:** 2016
 - **Supervisor:** Mohammad Mayyas
- 28. Title:** *Modeling and Simulation of capacitive sensor*
 - **Funded by:** BGSU-CURS program.
 - **Awarded Amount:** \$500 material + \$200 Stipend.
 - **Period:** 2016
 - **Supervisor:** Mohammad Mayyas
- 29. Title:** *Development of weather station- students independent study*
 - **Funded by:** College of Technology, Architecture and Applied Engineering
 - **Awarded Amount:** \$1000 material.
 - **Period:** 2016
 - **Supervisor:** Mohammad Mayyas
- 30. Title:** *Outreach research program for development of Robotics Alliance*
 - **Funded by:** faculty development grant-BGSU
 - **Awarded Amount:** \$2000 (Speaker series)
 - **Period:** 2014
 - **PI:** Mohammad Mayyas
- 31. Title:** *Robotics Facility Renovation- Lab 123 - for the Mechatronics Engineering Technology Program*
 - **Funded by:** Office of the Provost
 - **Awarded Amount:** \$160,000
 - **Period:** 2014
 - **Lab Director:** Mohammad Mayyas

University of Texas at Arlington (UT-Arlington) Grants:

- 32. Title:** *Biomechanical Interface for Optimized Delivery of MEMS Orchestrated Mammalian Epimorphosis*
 - **Funded by:** Armed Forces Institute of Regenerative Medicine, US Army
 - **Total Awarded Amount:** \$2000,000, Subaward: \$80,000 Per year.
 - **Period:** 2013-2016
 - **Multi-institutional:** (University of Texas at Arlington sub awardee PI: Mohammad Mayyas), (McGowan Institute for Regenerative Medicine at the University of Pittsburgh grant PI: Stephan Badylak).
- 33. Title:** *BIODOME reactor*
 - **Funded by:** McGowan Institute for Regenerative Medicine at the University of Pittsburgh
 - **Total Awarded Amount:** \$12,000
 - **Period:** June-August 2013
 - **PI:** Mohammad Mayyas
- 34. Title:** *Tower of Hanoi: A Sensorized Gaming Platform to Assess Cognitive Functions*
 - **Funded by:** College of Nursing, University of Texas at Arlington
 - **Total Awarded Amount:** \$10,000

- **Period:** August-Dec. 2013
 - **Co-PI:** Mohammad Mayyas, PI. Aditya Das.
- 35. Title:** *3D Point-of-Gaze Based Wheelchair Control*
- **Funded by:** University of Pittsburg
 - **Total Awarded Amount:** \$72,000
 - **Period:** 2012-2013
 - **PI:** Mohammad Mayyas.
- 36. Title:** *Manufacturing Innovation for Technology Transition*
- **Funded by:** Office of Naval Research
 - **Awarded Amount:** \$1,533,649
 - **Period:** 2011-2016
 - **Co-PI:** Mohammad Mayyas, PIs (Harry Stephanou -2011 Deceased-, Aditya Das 2012-2016)
- 37. Title:** *High-density Interconnect for high-resolution APD/ROIC Hybridization*
- **Funded by:** SBIR Phase I, Department of Defense, Air Force
 - **Total Awarded Amount:** \$250,000, Sub awarded: \$70,000
 - **Period:** 2008-2009
 - **Sub awardee PI:** Mohammad Mayyas, PIs (Princeton Lightwave PI- Sabbir Rangwala)
- 38. Title:** *Disruptive techniques for hybridization of focal plane arrays for optical imaging sensors*
- **Funded by:** SBIR Phase II, Department of Defense, Air Force
 - **Total Awarded Amount:** \$749,681
 - **Period:** 2010-2012
 - **Sub awardee PI:** Mohammad Mayyas, PIs (Princeton Lightwave PI- Sabbir Rangwala)
- 39. Title:** *Development of Microsystem Platforms in Hazardous environments Applications to Munitions and Enhancement*
- **Funded by:** Office of Naval Research
 - **Total Awarded Amount:** \$6,530,046
 - **Period:** 2008-2012
 - **Co-PI:** Mohammad Mayyas, PI: Harry Stephanou.
- 40. Title:** *Microactuator Array for CMP Pressure Control*
- **Funded by:** Strasbaugh
 - **Total Awarded Amount:** \$120,000
 - **Period:** 2011-2012
 - **PI:** Mohammad Mayyas, Co-PIs: John Sin, Wohoo(Jeff) Lee.
- 41. Title:** *Texas Youth in Technology Program*
- **Funded by:** Nanomaterials Design & Commercialization Center
 - **Awarded Amount:** \$70,000
 - **Period:** 2009-2010
 - **PI:** Mohammad Mayyas

Grants Prepared for Resubmission (BGSU)

- 42. Title:** *FASTER: Future Approaches for Semiconductor Training and Education w/ RAPIDs*
- **Total Estimated Amount:** \$2,586,238, BGSU Subaward: \$709,853 (Tentative based on previous submission)
 - **Status:** Revise and resubmit full proposal
 - **Targeted Source:** Intel Corporation.

- **Planned Resubmission:** 2025
 - **Multi-institutional Team:** (BGSU PI: Mohammad Mayyas, BGSU CO-PIs Mohammed Abouheaf, MD Za Islam), (University of Toledo PI: Raghav Khanna), (Ohio Northern University), (Northwest State Community College), (Lorian County Community College), (Rhodes State College)
- 43. Title:** *Renewable Energy Sources Integration into Hybrid Microgrids Using Machine Learning*
- **Estimate Amount:** \$256,000 (Tentative based on previous submission)
 - **Status:** Revise and resubmit full proposal
 - **Targeted Source:** USAID
 - **Planned Resubmission:** 2024
 - **Team:** USA (PI: Mohammad Mayyas, PI: Mohammed Abouheaf), Egypt (TBD)
- 44. Title:** *Smart Joints: Amorphous Legged Robots for Seamless Motion in Extraterrestrial Locations*
- **Estimate Amount:** \$412,011 (Tentative based on previous submission)
 - **Status:** Revise and resubmit Whitepaper
 - **Targeted Source:** National Defense Industrial Association, NASA or Micro Autonomous Systems and Technology, Us. Army.
 - **Planned Resubmission:** 2024
 - **Team:** (BGSU PI: Mohammad Mayyas, Johns Hopkins APL PI: Rochelle Mellish)
- 45. Title:** *Sensing ethanol levels during animal behavior*
- **Estimate Amount:** \$24,000 (Tentative based on previous submission)
 - **Status:** Revise and resubmit full proposal
 - **Targeted Source:** The American Association for Laboratory Animal Science (AALAS)
 - **Planned Resubmission:** 2024
 - **Team:** PI: Howard Casey Cromwell, Co-PI: Mohammad Mayyas.

VII. Selected Research and Development Projects

1. Successfully engineered a pioneering surveillance system utilizing autonomous micro-robots, revolutionizing monitoring in high-risk areas with advanced micro-robotics for sensor mobility enhancement. 2008-2011
2. Achieved a breakthrough in tissue regeneration by creating a novel biomechanical device, expertly designing biomechanical interfaces for restoring tissues in animal study. 2009-2013
3. Innovated in personal grooming technology by developing a long-lasting, high-precision shaving device, utilizing cutting-edge Excimer laser and Nanomachining for the ultra-fine sharpening of Sapphire blades, integrated with bespoke automation for precision. 2011-2012
4. Transformed silicon wafer polishing processes by upgrading Chemical Mechanical Polishing machines with MEMS-based technology, achieving mirror-like finishes through innovative distributed force control via piezoelectric actuators. 2009-2010
5. Mastered MEMS component assembly and packaging, designing sophisticated electro-thermo-mechanical actuators for precise micro-object handling, leveraging SOI fabrication technology and robotic arm synchronization. 2004-2008
6. Devised an efficient technique for detaching MEMS devices from large wafers, employing unique frequency-based shaking methods. 2009-2013
7. Developed a compact Fourier transform spectrometer, a significant advancement for immediate, onsite detection of biological and chemical materials, integrating a novel 3D optical system on a silicon micro-optical bench. 2007-2009
8. Led the development of microsystems manufacturing with an automated single-chip assembly process, providing a groundbreaking alternative to traditional multi-chip or monolithic fabrication methods. 2006-2009

9. Developed a Modified Stewart Platform Manipulator for precise orthopedic bone and structural frame alignment correction. 2009-2010, 2016
10. Successfully implemented precision kinematic coupling for wafer alignment, facilitating high-density interconnects and enhancing high-resolution APD/ROIC hybridization in night vision application. 2009-2011
11. Contributed to the establishment of the Texas MicroFactory in University of Texas Research Institute, assisting in setting up modular research and development cleanroom facilities and acquiring advanced MEMS microfabrication and testing equipment. 2004-2009
12. Assisted in development of an AI-driven Pedestrian and Driver Risk Prevention System, focusing on monitoring and predicting behaviors to categorize risks, effectively enhancing road safety and reducing accidents. 2020-2021
13. Established multimillion e-factory industry training and research and development facilities in Bowling Green State University, focusing on advanced additive manufacturing, advanced industrial and mobile robotics, control, Mechatronics, automation, and instrumentation. 2015-present
14. Integrated automated industrial cells using Mitsubishi SCARA robots, Fanuc Robot, Allen Bradley PLC, View Panel HMI, and Cognex Vision systems, showcasing efficiency in pick-and-place sorting. 2015-2020.
15. Developed algorithms using multimodal sensors (2D Vision, Lidar, Sonar) for Automated Guided Vehicles (AGVs), ensuring dependable navigation in complex environments 2021 -2023.
16. Led the construction of industrial protocol Ethernet-based I/O network for precision hard automation in material handling, successfully integrating conveyor belts, motor drivers, pneumatic solenoids, grippers, linear actuators, PLCs, HMIs, and laser curtains for enhanced efficiency and control. 2022.
17. Led the Implementation of an integrated automation system combining a Fanuc Robot, Allen Bradley PLC, View Panel HMI, and AI-powered Cognex Vision systems, demonstrating efficient classification, inspection and sorting of defective products including paper wrinkles and weld. 2023.

VIII. Publication

Patents

1. **M. Mayyas**, Shiakolas, P. "Method and Apparatus for Detethering Mesoscale, Microscale, and Nanoscale Components and Devices" U.S. Patent Appl.(Issued 2014)

Industry Report

2. **M. Mayyas**, "The Benefits of the Automated Guided Vehicles in the Smart Manufacturing Industry of Tomorrow", MHI Annual report for AGVS, Dec. 2018. Available at <https://www.mhi.org/free/26588>

Submitted

Mohammad Mayyas, Naveen Kumar, MD. Za Islam, and Mohammed Abouheaf "Multi-scale Grasping: A Kinematic Study of 5-Linkage Compliant Mechanisms" submitted to Part C: Journal of Mechanical Engineering Science

Zahabul Islam, Tanvir Ahmed, Mohammad Mayyas, Mohammed Abouheaf, Mechanical Response of Tungsten g-TPMS Lattice Structures, submitted to Journal of Materials Science & Technology

Under Preparation

M. Mayyas, "Destructive Oscillation for Selective and Parallel Release of Tethered Objects" to be submitted as a *letter communication to the journal of sound and vibration*.

M. Mayyas "REPLT TO REFERENCE [TRANSVERSE VIBRATIONS OF A LINEARLY TAPERED CANTILEVER BEAM WITH TIP MASS OF ROTATORY INERTIA AND ECCENTRICITY]" to be submitted as a *letter communication to the journal of sound and vibration*.

Peer-Reviewed Journal Publications

3. Abouheaf, M. I., Hashim, H. A., **Mayyas**, M. A., & Vamvoudakis, K. G. (2023). An Online Model-Following Projection Mechanism Using Reinforcement Learning. *IEEE Transactions on Automatic Control*.
4. **Mayyas, Mohammad**, and Mohammed Abouheaf. "Energy harvesting induced by the vibration of reciprocating-piston compressor subjected to repetitive impulse." *Journal of Vibration and Control* (2023): 10775463231201888.
5. Parvin, S., & Mayyas, M. (2023). Wind energy market in USA. *European Journal of Sustainable Development Research*, 7(1).
6. **Mayyas, Mohammad**. "Design characterization of 3D printed compliant gripper." *Meccanica* 57.3 (2022): 723-738.
7. Indravash Chowdhury, Ravinder Singh, Christopher Kluse, and **Mohammad Mayyas**, "Obstacle Design Approach for Safety of Free Ranging AGVs in Shared Working Environment". *Advances in Science, Technology and Engineering Systems Journal*, Volume 6, Issue 5, Page No 335-347, 2021.
8. **Mayyas, Mohammad**. "Modeling and analysis of vibratory feeder system based on robust stick-slip motion." *Journal of Vibration and Control* (2021): 10775463211009633.
9. **Mayyas, Mohammad**. "Interpolation of tensile properties of polymer composite based on Polyjet 3D printing." *Progress in Additive Manufacturing* (2021): 1-9.
10. **Mayyas, Mohammad**. "Parallel Manipulation Based on Stick-Slip Motion of Vibrating Platform." *Robotics* 9.4 (2020): 86.
11. **M. Mayyas**, Naveen Kumar, "DESIGN AND SYNTHESIS OF COMPLIANT MECHANISM FOR 3D MICRO-GRASPING" *International Journal of Robotics and Automation*, (2020) 206-0614
12. **Mayyas, Mohammad**, and Ikya Mamidala. "Prosthetic finger based on fully compliant mechanism for multi-scale grasping." *Microsystem Technologies* 27.5 (2021): 2131-2145.
13. **Mayyas, Mohammad**, Sai P. Vadlamudi, and Muhammed A. Syed. "Fenceless obstacle avoidance method for efficient and safe human-robot collaboration in a shared work space." *International Journal of Advanced Robotic Systems* 17, no. 5 (2020): 1729881420959018.
14. **M. Mayyas**, "Three-Point Inverse and Forward Kinematic Algorithms for Circle Measurement from Distributed Displacement Sensor Network." *Sensors* 19, no. 21 (2019): 4679. **M. Mayyas**, "Image Reconstruction and Evaluation: Applications on Micro-Surfaces and Lenna Image Representation," *J. Imaging*, 2, 27 (2016)

15. **M. Mayyas**, R. Mellish "A method for the automatic generation of inverse kinematic maps in modular robotic systems," *International Journal of Advanced Robotic Systems* 1–15 (2016)
16. **M. Mayyas**, "Piezoelectric MEMS array package for distributed CMP pressure control *Smart Materials and Structures* 24(6), 065006 (2015).
17. **M. Mayyas**, "Bioinspired legged-robot based on large deformation of flexible skeleton *Bioinspiration & biomimetics* 9(4), 046013 (2014).
18. **Mayyas, M.** Comprehensive Thermal Modeling of ElectroThermoElastic Microstructures. *Actuators*, 1, pp. 21-35 (2012)
19. **Mayyas, M.**, Zhang, P., Lee, W-H., Popa, D., Chiao, JC. "An active micro joining mechanism for 3-D assembly." *J. Micromech. Microeng.*, Volume 19 ,(2009)
20. **Mayyas, M.**, Sin, J., Stephanou, H. "Methodologies for the Assembly of a Fiber Coupled MEMS Fourier Transform Spectrometer." *IEEE Transactions on Components and Packaging Technologies*. Vol. 32, issue 1, 2009, pp. 658-666.
21. **Mayyas, M.**, Stephanou, H. "Electrothermoelastic modeling of MEMS gripper." *Microsystem Technologies*, 2009, Volume 15, Number 4, pp. 637-646. (2009)
22. **Mayyas, M.**, Shiakolas, P., Lee, W-H., Stephanou, H. "Thermal cycle modeling of electrothermal microactuators." *Sensors and Actuators A: Physical*, Volume 152, Issue 2, pp.192-202 (2009)
23. **Mayyas, M.**, Shiakolas, P. "Micro-surfaces reverse engineering and compensation for laser micromachining." *IEEE Transactions on Automation Science and Engineering*. Volume 6, issue 2, pp. 291-301 (2009)

Peer-Reviewed Conference Publications (Proceedings)

- 22 Mohammad Abouheaf, Wail Gueaieb , **M. Mayyas** , "Replication of Cascaded Dynamic Systems Using Machine Learning", accepted in 2023 IEEE International Symposium on Robotic and Sensors Environments, Japan.
- 23 Abouheaf, M. I., Vamvoudakis, K. G., Mayyas, M. A., & Hashim, H. A. (2023). An Observer-Based Reinforcement Learning Solution for Model-Following Problems. *arXiv preprint arXiv:2308.09872*.
- 24 MD Sarder, **M. Mayyas**, Reshoring and Its Economic Impact Analysis Using Location Quotient, 2018 IISE Annual Conference, May 19-22, Orlando Florida, United State.
- 25 R. Mellish and **M. Mayyas**, A Sensor-Based Control Strategy for the Correction of Growth Abnormalities In, 2015 IEEE International Conference on Multisensor Fusion and Information Integration. (IEEE, San Diego, CA, USA, 2015).
- 26 **Mayyas, M.** Lee. W.H., Stephanou H. Microrobotic surveillance: discrete and continuous STARbots," *SPIE Defense, Security, and Sensing* , 25-29 April 2011 in Orlando, Florida, United States.
- 27 Sin J., Lee W.H., Mittal M., **Mayyas. M.** and Harry Stephanou, Manufacturability Analysis of Assembled FT Microspectrometer," *International Conference on Optical MEMS & Nanophotonics* (Clearwater Florida, 2009)
- 28 **Mayyas, M.** Zhang, P., Lee, W- H., Shiakolas, P., Popa, D., 2007. Design Tradeoffs for Electrothermal Microgrippers, *ICRA07* (Roma, Italy, April 2007)
- 29 **Mayyas, M.**, Shiakolas, P. A Study on The Thermal Behavior Of Electrothermal Microactuators Due To Various Voltage Inputs. *Proceedings of IMECE 2006*, Paper No. IMECE2006-15321 (Chicago IL, November 2006)
- 30 **Mayyas, M.**, Shiakolas, P. Micro-Surface Construction and Characterization from Digital Elevation Model Using Thin Plate Splines in Matlab Environment. *Proceedings of IMECE 2006*, Paper No. IMECE2006-13471, (Chicago IL, November 2006)
- 31 Zhang, P., **Mayyas, M.**, Lee,W. H., Popa,D., Shiakolas,, P., Stephanou, H., Chiao, JC., 2006. An Active Locking Mechanism for Assembling 3D Micro Structures. *SPIE International Smart Materials, Nano- & Micro-Smart Systems Symposium* (Adelaide Australia, Dec.10-13 2006).

- 32 **Mayyas, M.**, Shiakolas, P., Lee, W. H., Popa, D., Stephanou, H.; 2006. Static and dynamic modeling of thermal microgripper. *MED06-14th Mediterranean Conference in Automation and Control* (Ancona, Italy, June 2006)
- 33 **Mayyas, M.**, Shiakolas, P. Application of Thin Plate Splines for Surface Reverse Engineering and Compensation for Femtosecond Laser Micromachining. *Proceedings of the IEEE International (Cyprus, 2005)*
- 34 Zhang, P., **Mayyas, M.**, Lee W. H., Popa, D., Shiakolas P., Stephanou, H., Chiao, JC., 2006. Design of an Active Lock for Integrating 3D Micro Structures. *TEXMEMS VIII International Conference on MEMS* (Dallas, Texas, Sept-2006)
- 35 **Mayyas, M.**, Zhang, P., Shiakolas, P., Lee W. H., Popa, D., Stephanou, H., 2006. Issues in the Current and Thermal Distribution for a Probed Electrothermal MEMS Actuator of Parallel Resistive Structure. *TEXMEMS VIII International Conference on MEMS* (Dallas, Texas, Sept-2006)
- 36 **Mayyas, M.**, Lee, W. H., Popa, D., Shiakolas, P., Zhang, P., Stephanou, H., 2005. Comprehensive Electrothermal Modeling of a Thermal Microgripper. *TEXMEMS VII International Conference on MEMS* (El Paso, TX, September 2005)
- 37 Hsu, L., George, V., Popa, D., Lee, W. H., **Mayyas, M.**, Zhang, P., Stephanou, H., Chiao, JC., 2005. 3D Microassembly Station. *in Proceedings of TexMEMS VII* (El Paso, Texas, September 2005)
- 38 **Mayyas, M.**, Shiakolas, P. Transient Thermal Model of an Attached Lateral Thermal Actuator. *TEXMEMS VII International Conference on MEMS*, (El Paso, TX, September 2005)
- 39 **Mayyas, M.**, Yih, TC., 2003. Analytical Modeling of Circular Micropump Membrane Actuated by an Electromagnetic Actuator. *TexMEMS V Conference and Workshop* (Fort Worth, TX, May 2003)

STEM Education and Engineering Posters:

- 40 Dapelo, L., Austin, J., Justice, T., Sarder, M., **Mayyas, M.**, Abouheaf, M., and Islam, Z., (2023), STEM Curriculum Development of Renewable Energy, Robot Construction, and Medical Application of Additive Manufacturing, 2023 NSF Research Experience for Teachers (RET) Virtual Poster Session.
- 41 Doolittle, C., Kulwicki, Z., Williams, S., Abouheaf, M., Islam, Z., **Mayyas, M.**, and Sarder, M., (2023), Enhancing Problem-Solving Skills Through Integration of Fanuc Robot Arm, Machine Vision, Mechatronics, Electrical Circuit, and 3D Printing Design: A 5E Model Approach, 2023 NSF Research Experience for Teachers (RET) Virtual Poster Session.
- 42 Howey, D., Martin, C., Smelcer, K., Islam, Z., Sarder, M., Abouheaf, M. and **Mayyas, M.** (2023), Development of STEM Curriculum through Experiential Learning Case Studies- RoboDK industrial robotics Software, Automation Studio Motor Simulation and 3D printing of Composite Material, 2023 NSF Research Experience for Teachers (RET) Virtual Poster Session.
- 43 Aljabr, B., Faisant, J., Foos, B., Islam, Z., Sarder, M., Abouheaf, M. and **Mayyas, M.** (2023), Expanding STEM Opportunities for K-14 Students Through Teacher Research Experience, 2023 NSF Research Experience for Teachers (RET) Virtual Poster Session.
- 44 Farley, P., Fisher, C., Jarusiewicz, S., Islam, Z., Sarder, M., Abouheaf, M. and **Mayyas, M.** (2023), Exploring Integrated Industrial Automation: Hands On Learning with PanelView HMI, ControlLogix PLC, and Fanuc Robot ER 4iA, Pick n Place Case Study, 2023 NSF Research Experience for Teachers (RET) Virtual Poster Session.

IX. Selected Presentations

- 45 Advancing Interoperability and Integration of Ground and Water Robotics: is there a role for small scale robotics in defense application? Military robotic summit, Institute for Defense and Government Advancement, August 27 - 29, 2012 - Hilton Alexandria Old Town, Alexandria, Virginia.
- 46 Micro-robotics Application for Security: Unmanned Ground Systems Technology: The Role of Micro-Robotics in Border Management, 2nd Annual Border Management Summit Southwest, Institute for Defense and Government Advancement, El Paso, TX, May 23-25 2011. (Invited session leader)
- 47 Constructing Microrobots, Arlington Technology Association, College of Engineering, UT-Arlington, June 1st 2011. (Invited speaker)
- 48 Proposal for National Center for Integrated Microsystems Technologies, and a National Center for the Security and Assurance of Information and Communication Systems, Video conference with King Abdulla II of Jordan, & President of Hashemite University, Feb. 11th 2011.

X. Selected Media Spotlights on Research and Engagement

1. BGSU Visits by Ohio Officials

- "Ohio Gov. Mike DeWine Tours Nursing, Robotics Facilities at BGSU." Toledo Blades, BG Independent, October 2021.
- "Ohio Lt. Gov. Husted Tours BGSU's Robotics and Engineering Labs." The Morning Show BG, Sentinel Tribune, WTOL11, August 2022.

2. Arts and Robotics

- "Interactive Art at Toledo Museum of ART Summer Camps." Toledo Blades, NBC, 2017.

3. BGSU Promotions and FalconBEST

- "FalconBEST 2016: 25-Minute Program Interview." WBGTV, 2016.
- "FalconBEST 2016: Coverage on Multiple Local Newspaper Interviews and TV." The Blade, WBGTV, NBC, 2016.
- "BGSU Promotional Video for Engineering Technologies." Featuring interviews and students working in the lab, 2016.
- "BGSU TV Advertisement." Scene taken in the lab with a student constructing ground robots, 2014.

4. Robotics Research and Advancements

- "Robotics Revolution." UT Arlington Magazine, Spring 2011. Featured on the cover page.
- "Tiny Machines for Surveillance & Intelligence-Gathering." Interview by Randi Kaye from CNN International with ARRI director regarding microrobotics for defense, August 19, 2011.
- "Microrobots: The 2nd Generation Industrial Revolution." Discussion on CBNC by Cramer with ARRI director about a microbot with significant capabilities, May 26, 2011.

XI. Graduate Student Projects

Supervisor

- R. Jahan – "3D Printed Flexible Material Properties" (2020, MTM/BGSU)
- J. Dixit Goalla – "Vibration Platform for Material Transport" (2020, MTM/BGSU)
- S. Vadlamudi – "Object Trajectory Prediction for Safety" (2020, MTM/BGSU)
- I. Chowdhury – "Human-Robot Safety & Collision Probability" (2020, MTM/BGSU)
- A. Ayoko – "Modified Steward Platform Design" (2016, BGSU)
- I. Mamidala – "Scalable 3D Grasping Mechanism" (2016, BGSU)
- R. Mellish – "Growth Abnormality Correction" (2011, UT-Arlington)
- K. Doelling – "CNC Laser & Robotic Arm Integration" (2012, UT-Arlington)

- D. Hua – "Micro Robotics Wireless Network" (2009, UT-Arlington)
- A. Bedoin – "Solder Reflow Simulation on Silicon" (2009, UT-Arlington)
- R. Rose – "MEMS Chips Vibration Platform" (2008, UT-Arlington)
- K. Sharad – "Precision Catheter Needle Design" (2008, UT-Arlington)

Committee Member

- T. Ackon, Supervisor: C. Kluse – "Sustainability vs Competitiveness" (2019, MTM/BGSU)
- A. Mehmood, Supervisor: C. Kluse – "Sustainability Reports & LDA Topic Modelling" (2018, MTM/BGSU)
- A. Alwarsh, Supervisor: C. Kluse – "Lean Six Sigma & Leadership" (2017, MTM/BGSU)
- J. Espinoza, Supervisor: C. Kluse – "Course on Lean Development" (2016, MTM/BGSU)
- Z. Brush, Supervisor: A. Bowling – "Smart Bed for Ulcer Prevention" (2012, MSME/UTA)

XII. Association & Professional Activities

Professional Memberships & Affiliations:

- AAC&U, since 2017
- SPIE (Optics, Photonics, & Imaging), since 2011
- IEEE, 2003-2009 & renewed 2015
- ASME, 2005-2013
- Jordan Engineers Association, since 2001

Editorial & Committee Roles:

- Associate Editor, Robotics & Automation Engineering Journal, since 2017
- Editorial Board, Journal of Robotics & Mechanical Engineering Research, since 2016
- Int'l Scientific Committee, ICEWES 2015
- Head, Int'l Scientific Committee, Hashemite University, Jordan

Reviewer For:

- IEEE Robotics & Automation, JM3, ASME-IMEC, IEEE T-ASE, IEEE Automatic Control, Int'l Journal of Engineering Science, Sensor & Actuators- Physics, SPIE-imaging, Actuators, Microsystems Technologies

Other Activities:

- Coordinates national and international student tour days focusing on automation and robotics at MODEX (Atlanta) and ProMat (Chicago) annual trade shows, under the auspices of the College Martial Handling Institute (MHI)'s Industry Council on Material Handling Education (CICMHE), 2021-present.
- Attended the Material Handling Institute's teacher workshop in San Marcos, TX, 2019.
- Achieved certification in Fanuc Robotics instructor training, focusing on programming and vision systems, Fanuc North America, MI. 2019.
- Provided consultancy services for the Material Handling Institute's Automated Guided Vehicle industry group, 2018.
- Completed instructor training and certification for Mitsubishi robots, Rixan Associate, Oh. 2016.
- Earned ANSYS APDL and Workbench Certification from Phoenix Analysis & Design Technologies in Arizona, 2010.
- Participated in NSF & NIH Grant writing training at the University of Cleveland, 2014.
- Engaged in academic and industry collaborations through facility tours, including visits to the Massachusetts Institute of Technology in Boston and Disaster City in Texas.
- Facilitated the establishment of an MOU between UT-Arlington AURAK-UAE in 2015.

- Contributed to the formation and ongoing maintenance of the NORTH consortium, encompassing institutions in Northwest Ohio, from 2015 to present.
- Engaged in dialogues with nearby community colleges (Terra, Defiance, Northwest State) to initiate program articulation, ongoing since 2016.
- Actively participated in various industry-academia discussions for workforce development with companies including Rixan Associate Inc., Magna Nonplus, VeTek, First Solar, GKN Driveline, Sauder, Cognex, ongoing since 2016.
- Designed and executed an Interactive Electronics and Art summer camp at the Toledo Museum of Art for underrepresented students, 2017-2018.
- Organized seminars for the Tech Trek summer camp to support women in engineering, 2016.
- Served as a judge for STEM competitions, including FalconBest Robotics (2013-2014) and Science Olympiad (2016).

XIII. General Administrative and Service Duties

Committee Leadership & Membership:

- Spearheaded various search committees such as (VP of research, 2022; Engineering Dean, 2023; Department Chair 2016; Engineering faculties 2020-present)
- Actively participated in merit dossier evaluations and peer reviews, Tenure, and promotion, ensuring academic excellence (2013-Today).

Student Engagement & Mentorship:

- Engaged in undergraduate and graduate student advising, providing guidance and support (2013-2016).
- Mentored all Engineering Technology students and supervised senior design projects (2013-present).
- Mentored Mechatronics Engineering Technology students and supervised competitive student projects, like (HATCH, 2016; CURS 2015).
- Evaluated industry cooperative education reports and conducted employer site visits to ensure comprehensive experiential learning.

Program Development & Enhancement:

- Initiated and structured the Mechatronics Engineering Program and Robotics Engineering, including curriculum design and resource allocation (2016- Today).
- Played a pivotal role in obtaining ETAC-ABET accreditation for the Engineering Technology, and Mechatronics Engineering program (2013- Today).
- Contributed to the development of core robotics courses, keeping pace with industry trends and academic standards (2017-Today).

Outreach & Recruitment:

- Regularly participated in key program recruitment events, aiding in student enrollment and engagement (2013-Today).
- Developed and taught a creative STEM workshop for underrepresented middle and high school students, focusing on Mechatronic Sculptures, at the Toledo Museum of Art.

Facility & Resource Expansion:

- Instrumental in enhancing departmental educational facilities, incorporating advanced, multimillion-dollar equipment (2016-Today).

Extra-Curricular Initiatives:

- Founded and oversee the "Falcon Robotics" Club, Falcon BEST Robotics and Summer Camps; fostering practical skills and team collaboration among students (since 2015).
- Manage the Robotics program website, ensuring up-to-date content and student accessibility (since 2015).

Representational Roles:

- Served as the department's library representative, graduate faculty representative, and undergraduate college council representative, among others liaising effectively between students, faculty, and administrative units (2013-Today).

XIV. Course Development & Teaching*Course Development:*

- TECH6710: Automation and Robotics in Advanced Manufacturing, launched in 2019.
- ENGT 4000: Advanced Modeling, Simulation & Analysis
- ROBO2080: Industrial Robotics, launched in 2017.
- ROBO4500: Senior Design Project, launched in 2017.
- TECH6800: Advanced Modeling & Simulation of Mechatronics Systems, launched in 2017.
- TECH5860/Tech6820: Advanced Industrial Robotics, launched in 2017.
- ENGT4800/Tech4950: Introduction to Robotics, launched in 2015.
- ENGT1020: Introduction to Engineering Tech., launched in 2013.
- ENGT1100: CAD, launched in 2015.
- ENGT2480: Dynamics, launched in 2014.
- ENGT3280: Thermodynamics, launched in 2014.
- ENGT1020: Introduction to Engineering Tech., launched in 2013.
- MATH2910: Applied Engineering Mathematics with Applications, launched in 2019.
- ROBO1010: Sensors & Actuators, launched in 2017.
- ROBO 3131 Introduction to Robotics: Kinematic and Control, launched in 2022.
- ROBO 3210 System Dynamics, launched in 2022.
- ROBO 3232 Robot Operating Systems, launched in 2022.
- ROBO 3133 Microfabrication and Semiconductor Processes, launched in 2022.
- ROBO 3032 Biomedical Device Technology, launched in 2022.
- ROBO 4033 MEMS Finite Element Analysis, launched in 2022.

Undergraduate Course Taught:

- ENGT 4500, ECET 4500, ROBO 4500: Senior Design project (Fall/Spring, 2014-2023)
- MTM/ENGT 2400: Statics (Fall, 2019-2023)
- MTM/ENGT 2480: Dynamics (Spring, 2014-2023)
- ROBO2080: Industrial Robotics (Spring, 2017-2021)
- ROBO1010: Sensors & Actuators (Fall, 2017)
- ENGT 4000: Advanced Modeling, Simulation & Analysis (Fall, 2017-2019)
- ENGT 3280: Thermodynamics (Fall, 2014-2017)
- ENGT1020: Introduction to Engineering Tech (Fall, 2014-2016)
- ENGT1100: CAD (Fall, 2015)

Graduate Course Taught:

- TECH 6500: Seminar in Renewable Energy (Spring 2021)
- TECH 6710: Automation and Robotics in Advanced Manufacturing (Spring 2019,2021)
- TECH 6800: Modeling, Simulation, and control of Mechatronics Systems (Spring 2016-2018)
- TECH5860/Tech6820: Advanced Industrial Robotics (Spring 2015)
- TECH 6790: Research and Development in Technology (Fall 2014)

XV. Programs Development & Accreditation

- Led the development of the Bachelor of Science in Robotics Engineering degree Program, a minor of robotics engineering, and also assisted in establishing the School of Engineering at Bowling Green State University, with student enrollment anticipated to start in 2024.
- Initiated and launched the interdisciplinary Bachelor of Science in Mechatronics Engineering Technology Program at Bowling Green State University in 2014, blending multiple engineering disciplines for practical industrial applications, with student intake beginning in 2016.
- Directed and obtained the first-ever ABET/ETAC accreditations for the Mechanical and Mechatronics Engineering Technology programs at Bowling Green State University in 2017 and 2019, respectively, by crafting assessment tools and self-study reports, and addressing evaluators' feedback, and achieved a six-year accreditation renewal for the latter in 2022.

XVI. Awards and Recognitions

- Received the Citizen Diplomat Certificate from the North Texas Council for International Visitors, Department of State, 2011.
- Honored with the International Academic Service Award from Hashemite University, Jordan, 2011.
- Listed in Madison Who's Who Among Executives and Professionals, Honors Edition, 2009.
- Awarded the CGS/UMI Distinguished Dissertation Award at UTA, 2008.
- Secured the 1st Best Student Award for Highly Innovative and Out-of-the-Box Concepts at UTA, 2008.
- Recognized in Marquis Who's Who in the World, 2010, and Marquis Who's Who in America, 2010.
- Granted the STEM Fellowship from the Automation & Robotics Research Institute, 2006-2008.
- Received the Herman Fellowship at UTA, 2007.
- Beneficiary of the Hashemite University Doctoral Fellowship, Jordan, 2003-2006.
- Won the 1st Best Symposium Paper Award at the Nano- & Micro-Smart Systems Symposium, Australia, 2006.
- Achieved the 2nd Best Conference Paper at TeXMEMS VII, Texas, 2005.
- Selected for the IEAST/DAAD scholarship, Freiburg, Germany, 2000.
- Awarded Best Undergraduate Capstone Project in Mechanical Engineering by the Jordan Engineers Society, 2000.

XVII. Selected Certifications

- Fanuc robotics certified instructor: Handling, Programming and Vision system
- Operation/Maintenance of Mitsubishi Robots Certification, *Rixan Associate, OH.* 2016
- NSF, NIH Grant Technical Writing Training Certification, *Cleveland State University.* 2014
- ANSYS APDL and Workbench Certification, *Phoenix Analysis & Design Technologies, AZ.,* 2010

XVIII. References

- ☑ Ali Abolmaali, Dean, College of Engineering, Wayne State University, Detroit, MI 48202, (313) 577-3776 | abolmaali@wayne.edu
- ☑ Ali Eskandarian, Interim Vice President of Research, Bowling Green State University, Bowling Green, OH. 43202, (703) 608-4923 | eskanda@bgsu.edu
- ☑ Panos Shiakolas, Professor, Mechanical Engineering Department, The University of Texas at Arlington, Arlington, TX. 76019, (214) 794-8242 | shiakolas@uta.edu

APPROPRIATION ORDINANCE 2024-XX

Whereas, an operating budget is to be authorized annually by the Board of Trustees; and

Now, Therefore, Be it Ordained: that the Board of Trustees adopts the budget as presented at this meeting and shown below that most complies with the budget of the State of Ohio and the restrictions that apply to tuition and fees;

	FY2025 Proposal
General Fund Expenditures	
Salaries	\$220,731,754
Staff Benefits	\$80,656,918
Scholarships, Fellowships & Fee Waivers	\$190,935,282
Less Financial Aid Discount	(\$157,838,705)
Utilities	\$16,652,038
Support Expense	<u>\$34,457,537</u>
Sub-Total General Fund Expenditures	\$385,594,824
General Fund Transfers	
Debt Service (Mandatory)	\$14,939,577
General Fee & Other (Non-Mandatory)	<u>\$66,443,366</u>
Total General Fund	\$466,977,766
Designated Funds	\$67,070,709
Restricted Funds	\$78,844,836
Auxiliary Enterprises:	
Expenditures	\$121,296,216
Debt Service (Mandatory)	\$40,973,613
Other Transfers	<u>\$28,398,682</u>
Total Auxiliaries	<u>\$190,668,510</u>
TOTAL	\$803,561,821

Be It Further Ordained: that the Senior Vice President for Finance and Business Services and Treasurer, with the approval of the President, may make such adjustments as are necessary in the operating budget within the limits of available funds or within the limits of additional income received for a specific purpose ("restricted funds"); and

Be It Further Ordained: that the appropriation for fiscal year 2025 authorizes a 3% increment pool to be awarded as determined by the President of the University; and

June 28, 2024

RESOLUTION R2024-xx

WHEREAS, Miami University has entered into a lease agreement with The Board of Education of Butler Technology & Career Development Schools to develop an Advanced Manufacturing Workforce and Innovation Hub (The Hub); and

WHEREAS, the programming for The Hub will be located at the recently acquired property at 101 Knightsbridge Dr., Hamilton, OH; and

WHEREAS, Miami University has an agreement to receive \$2,000,000 from The Board of Education of Butler Technology & Career Development Center and has identified local funds in the amount of \$17,100,000 for the renovation of the facility to accommodate The Hub; and

WHEREAS, the \$19,100,000 budget includes a cost of work estimate of approximately \$13,400,000; and

WHEREAS, it has been determined the best value for the University would be to utilize the Design-Build method of project delivery;

WHEREAS, the receipt of the Guaranteed Maximum Price is planned for September 2024; and

NOW, THEREFORE, BE IT RESOLVED: that the Board of Trustees hereby authorizes the Senior Vice President for Finance and Business Services and Treasurer, to proceed with the award of contracts for The Advanced Manufacturing Workforce and Innovation Hub project with a total project budget not to exceed \$19,100,000.

Executive Summary
for the
Advanced Manufacturing Workforce and Innovation Hub
June 26, 2024

Miami acquired 101 Knightsbridge Drive in early May. The site is expected to house engineering technology and advanced manufacturing programming. Responding to the current and predicted future workforce and applied research needs of Butler County and Southwest Ohio manufacturers, Butler Tech and Miami University are leading a unique effort to establish a new advanced manufacturing hub in Butler County. A collaboration among Miami University, Butler Tech, the Butler County Board of Commissioners, and the City of Hamilton, the hub will bolster the region's strong manufacturing base and serve the needs of industry and students through education, training and research.

The project will focus on approximately 70,000 square feet of renovation. Significant renovation, deferred maintenance, and utility infrastructure upgrades are required to convert the space from an office environment to an educational manufacturing environment. The project is intended to invest \$11,700,000 into the program space. The remaining \$7,400,000 is intended to be allocated toward infrastructure needs across the entire facility.

Funding for this project will be from local funds:

<u>Project component:</u>	<u>Budget:</u>	<u>Funding Source:</u>
Est. Design and Administration:	\$ 1,335,000	Local Funds
Est. Cost of Work:	\$13,400,000	Local Funds & BT Contribution
Est. Owner's Costs:	\$3,365,000	Local Funds
Est. Contingency:	<u>\$ 1,000,000</u>	Local Funds
Est. Total:	\$19,100,000	

RESOLUTION R2024-xx

WHEREAS, the McGuffey Hall Roof Replacement project involves the replacement of approximately 20,000 square feet of original clay tile roof, and the replacement and repair of three vent towers; and

WHEREAS, Miami University has identified local funds in the amount of \$3,650,000 for the project; and

WHEREAS, bids were received in June of 2024 within the budget to perform this work; and

WHEREAS, the Board of Trustees desires to award contracts to the lowest responsive and responsible bidders;

NOW, THEREFORE, BE IT RESOLVED: that the Board of Trustees hereby authorizes the Vice President for Finance and Business Services and Treasurer, with the concurrence of the Board Chair and Chair of the Finance and Audit Committee, in accordance with all State guidelines, to proceed with the award of contracts for the McGuffey Hall Roof Replacement project with a total project budget not to exceed \$3,650,000.

Executive Summary
for the
McGuffey Hall Roof Replacement
June 26, 2024

McGuffey Hall houses the College of Education Heath and society. The facility was built in three different sections; the original building was constructed in 1909, and later additions were erected in 1914 and 1924. The clay tile roof has never been replaced. Sections of the flat roof areas have been replaced and repaired in recent decades. This project will replace the clay tile roof completely including flashing, repair any deteriorated substrate, repair existing vent towers, and other miscellaneous repairs.

Funding for this project will be from local funds:

<u>Project component:</u>	<u>Budget:</u>	<u>Funding Source:</u>
Est. Design and Administration:	\$ 400,000	Local Funds
Est. Cost of Work:	\$2,670,000	Local Funds
Est. Owner's Costs:	\$330,000	Local Funds
Est. Contingency:	<u>\$250,000</u>	Local Funds
Est. Total:	\$3,650,000	

June 28, 2024
Other Business

RESOLUTION R2024-xx

BE IT RESOLVED: that the Board of Trustees hereby appoints Richard McVey as a National Trustee for a three-year term beginning June 28, 2024, and ending June 27, 2027.



The Miami Pulse

Connecting, Assessing, and Moving Forward our Inclusive Community

Office of Transformational and Inclusive Excellence Newsletter

June 2024 Edition

Land Acknowledgement

Miami University is located within the traditional homelands of the Myaamia and Shawnee people, who along with other indigenous groups ceded these lands to the United States in the first Treaty of Greenville in 1795. The Miami people, whose name our university carries, were forcibly removed from these homelands in 1846.

In 1972, a relationship between Miami University and the Miami Tribe of Oklahoma began and evolved into a reciprocal partnership, including the creation of the Myaamia Center at Miami University in 2001. The work of the Myaamia Center serves the Miami Tribe community and is dedicated to the revitalization of Miami language and culture and to restoring that knowledge to the Myaamia people.

Miami University and the Miami Tribe are proud of this work and of the more than 140 Myaamia students who have attended Miami since 1991 through the Myaamia Heritage Award Program.

Letter from the Vice President for Transformational and Inclusive Excellence



Greetings Miamians and congratulations to our Class of 2024 graduates!!

Coming together to celebrate the many accomplishments of our graduates is a wonderful experience, and this end of semester’s Horizon, Lavender, and Commencement ceremonies provided very special opportunities to come together as a community to recognize and celebrate our graduates’ many accomplishments. We hope that as the summer gets started everyone has an opportunity to also enjoy some rest.

As you explore opportunities this summer, we invite you to learn more about programming planned for Pride Month and Juneteenth this month through this newsletter. In this issue, we are excited to share with you information about the creation and purpose of our new RedHawks Pride logo; Miami’s Queer and Trans Faculty and Staff Association (QTFSA) affinity group, designed to support employees

through community building and resource sharing; Amanda Kaufman, a second year master’s student in the Sports Leadership and Management (SLAM) program; and Mat Hall ‘11, who returned to Miami to contribute to a more inclusive Miami in his role as Associate Director of LGBTQ+ Initiatives in CSDI.

We are also happy to share that Miami University has been recognized on Forbes America’s Best Employers for Diversity 2024 list, in recognition of our community’s efforts to embrace inclusive excellence as a workplace. Miami ranked No. 16 overall, and #1 in Education. Even as we continue to recognize that there is still much more work to be done, we recognize the progress we make and celebrate our accomplishments. Thank you to all who contribute to making Miami a more inclusive community.

As always, we welcome your feedback and suggestions and invite you to reach out to OTIE staff, and explore available resources through our webpage.

Thank you for all you do to reflect and advance Miami’s commitment to an inclusive community.

Love and Honor,
M. Cristina Alcalde, Ph.D. (she/her/hers)
Vice President, Office of Transformational and Inclusive Excellence
Professor, Global and Intercultural Studies
vpDiversity@MiamiOH.edu

Heritage Month Updates

Working in close collaboration with faculty, staff, and student partners, the Office of Transformational and Inclusive Excellence (OTIE) provides opportunities for the Miami community to continue our learning and engage in meaningful programming. Heritage Month programming supports Miami’s inclusive excellence approach.

OTIE organizes programming, collaborates, coordinates, and supports events across campuses through a coordinated calendar for each month; promotion of events; and, when available, limited funding support for proposed events with appeal across campuses. MU Libraries is partnering with OTIE to feature online resources, including films, books and articles, and class offerings, during each Heritage Month. We invite you to explore these and other educational resources and links on each webpage.

To learn more about this quarter’s heritage months please visit our Heritage Month webpage:

- June: [LGBTQIA+ Pride Month; Juneteenth](#)

For upcoming events, visit our [University Events calendar page](#).

Heritage and History Month Events Submissions
Now Accepting [Submissions](#) for Heritage and History Month events and programming for Spring semester. [Submit](#) your proposal considering [priority deadlines](#) for each proposed history and heritage month celebrations.



Affinity Groups

Asian/Asian American Faculty Staff Association
President: April Robles, Director of Operations and Communications

The mission of the Asian/Asian American Faculty Staff Association is to bring together Asian and Asian American faculty and staff, and serve as a supportive community for Asian and Asian American employees and students. The Asian/Asian American Faculty Staff Association is currently building traction with the community and is seeking to provide opportunities for individuals to connect in a more casual atmosphere and then use that leverage to continue the growth and momentum of the group. If you are looking to make an impact and be a leader, this is the group for faculty and staff to join! If it is a personal passion and something they want to do to become more connected to the campus community, you are encouraged to reach out to April Robles to connect.

Association of Black Faculty and Staff
President: Seth Seward, Assistant Director, Alumni Relations

The Association of Black Faculty and Staff stands for diversity, equality, solidarity, and change for campus at large, students, and the Oxford community. As an organization, they will engage and participate in any efforts that are meant to educate and provide clarity of ideas of ending racism and discrimination. The Association of Black Faculty and Staff serves as a safe place for African American or black individuals to come together and meet. This is accomplished through general body meetings and social events. If something arises on campus that impacts the community, they gather together to discuss and hash out solutions in a safe space. The group also works to serve as a support system and network for students, staff, and faculty. While there are no current community events planned, anyone interested in becoming a member is encouraged to complete the membership formstack to connect.

Association of Latinx Faculty and Staff
President: José Amador, Associate Professor, Global and Intercultural Studies (Latin American, Latino/a, and Caribbean Studies)

The primary goal of the Association of Latinx Faculty and Staff primary is to support and raise awareness about the Latinx faculty and staff. They aim to build networks between departments and units, faculty and students, and Miami university and the community at large. The group also strives to raise the visibility of the Latin American Studies Program and the nearby Latinx community. Additionally, to keep everyone informed about everything Latinx-related, which is done through a weekly “bulletin” with news and events.

This organization has been formed by employees of Miami University (Hamilton, Middletown, and Oxford campuses) to foster Latinx, Latin American and Caribbean, and Ibero, Luso-American representation, improve work conditions, and enrich the social and cultural environment for all Miami faculty, staff, and students. Individuals interested in connecting can reach out to José Amador.

Classified Personnel Advisory Committee
President: Angela Coffey Brown, Administrative Assistant, Enrollment Management and Student Success

The Classified Personnel Advisory Committee is established for the purpose of advising the President, Vice Presidents, and Human Resources on matters of interest and concern to classified staff members in the context of the whole university community. The group accomplishes this by bringing issues/concerns/proposals to administration for input and/or action, serving (individual members) on university committees, and providing feedback/input on matters brought to the committee for review. Additionally, the Classified Personnel Advisory Committee is established to provide an institutional venue or forum in which matters of interest or concern to classified staff members can be discussed, considered, and/or moved forward through appropriate channels. Anyone interested in connecting with or joining the committee can contact Angela Coffey Brown or reach out to the CPAC email.

Disabled Faculty and Staff Association

The goal of the Disabled Faculty and Staff Association is to bring employees with disabilities together to build community and support each other. This is a newly formed affinity group and the group is currently seeking individuals to run for leadership roles.

For more information about DisFSA, [join the listserv](#).

International Faculty and Staff Association
President: Ebru Dirs​el-Duffield, Associate Teaching Professor, American Culture and English Program

The goal of the International Faculty and Staff Association at Miami is to support and connect international faculty and staff while helping each other thrive in their specific roles on campus. This is accomplished through connecting with colleagues from diverse cultural, ethnic, racial, linguistic, and educational backgrounds, and broadening perspectives, welcoming diversity, and experiencing inclusion at Miami. The group also seeks to listen, understand, and identify the needs of international faculty/staff, address the concerns and needs of the university, provide relevant resources as needed, and help international faculty/staff. The main goal of the group is to support one another in professional development at the university.

Interested individuals can reach out to IFSAM’s president Ebru Dirs​el-Duffield.

Queer and Trans Faculty and Staff Association
President: Emily Cluen, Access Coordinator, Miller Center for Student Disability Services

The goal of the Queer and Trans Faculty and Staff Association is to create space for the LGBTQIA community on campus and advocate for queer and trans individuals needs. The group is currently working on establishing and maintaining a larger group to allow for more capacity moving forward. For more details or to join our listserv, email QTFSA@MiamiOH.edu. The group is looking to host more events moving forward to connect with more folks on campus and provide more networking opportunities. Interested individuals can email the group’s email address to connect.

Unclassified Personnel Advisory Committee
President: Sarah Persinger, Associate Director FBS Technology Operations & Support

The Unclassified Personnel Advisory Committee was created in 1983 to advise the University Administration (specifically the president and vice presidents) on matters of interest and concern to unclassified personnel. Committee members are selected to reflect a balance of gender, race/ethnicity, campus, division, level in the organization, responsibilities, years of university service, and any other characteristics that help to achieve a balance of knowledge, experience, viewpoints, interests and talents. The group’s most recent endeavor was focussing on wellness and bringing back access and funding to wellness areas on campus. Individuals interested in joining are encouraged to attend the monthly virtual meetings, which take place on the second Tuesday of each month. Interested individuals can also connect with Sarah Persinger for more information.

Sign-up for an Affinity Group listserv for the latest updates on how you can connect with other across campus.



For More Information

To learn more about these affinity groups or to join a group, check out the main affinity groups web page for more information on upcoming events, future meetings, and ways to connect.

Inclusive Excellence

Campus Spotlight

Institutional Spotlight: RedHawks PRIDE



The Office of Transformational and Inclusive Excellence’s (OTIE) LGBTQ+ Task Force was established in the spring of 2023 to discuss ways to strengthen the sense of belonging for LGBTQ+ faculty, staff, and students at Miami University. This group was formed to examine, and assess policies, programming, and support systems to provide institutional recommendations to better serve LGBTQ+ faculty, staff, and students in the context of a fully inclusive Miami community.

One project undertaken by the LGBTQ+ Task Force and the Office of Transformational and Inclusive Excellence, in partnership with the University Communications and Marketing team this year was to create an LGBTQ+-affirming graphic for the Miami University community. Task force co-chair Hiram Ramirez explained the task force was able to identify a great need in the community for more visibility and a strong presence of the LGBTQ+ community. This led to discussions with University Communications and Marketing (UCM) and the creation of the RedHawks Pride logo. Ramirez elaborated on this process, sharing, “The creation of the RedHawks Pride logo is an example of a way in which Miami University can be more supportive of and have more LGBTQ+ visibility on campus. One of the things the task force helped us with was unearthing a lot of LGBTQ+ history at Miami and through these efforts, we learned that the RedHawks Pride logo is the first of its kind within Miami University history.”

After the research phase was completed, the task force connected with UCM at large and graphic designer Kenzie Bryant to discuss potential designs for the graphic they were seeking. Bryant, who serves on UCM’s diversity, equity, and inclusion focus committee, yoUCM, was charged with designing a graphic to fulfill the request of the task force. Bryant noted her desire to “create something that encompassed everyone. I wanted this graphic to provide LGBTQ+ folks on campus with something they could see and immediately know they belonged and could be themselves here. As an alumna of the Regionals campuses, I know firsthand what it is like to walk into Miami and know that you will belong here and be able to be your true self here.”

Bryant went on to share that during her freshman orientation, she was able to join Pride, an LGBTQ+ student organization designed to support students on campus, previously the Gay-Straigh Alliance. “My very first introduction to being involved with Miami University besides being just a student attending [Miami], was at my orientation session. I learned about our LGBTQ+ student organization at Regionals, and as a freshman, I joined that student organization and was able to connect with my peers who identified as part of the LGBTQ+ community. Coming from a private school with no LGBTQ+ representation, it was so nice to be fully welcomed at Miami University and find my people in a student organization.” As Bryant worked her way through her degree she went on to become a full-time graphic designer with UCM. In this and previous roles, she has continued to support LGBTQ+ student populations on campus. Bryant shared, “When we received the request for the RedHawks Pride logo, my creative director immediately assigned it to me because of my experience with the LGBTQ+ community at Miami. As an openly out and proud bisexual woman, I was honored to play a role in the creation of this logo.”

The final RedHawks Pride logo was created to demonstrate that all LGBTQ+ students on all Miami campuses belong here and will be affirmed and supported in their identities. Bryant explained that the progressive pride flag was utilized in the graphic to showcase the most current and inclusive version of the LGBTQ+ flag. This imagery, paired with the “RedHawks PRIDE” text in Miami red, showcases the message of inclusion and belonging by demonstrating a commitment to supporting the LGBTQ+ community at Miami University. Senior Director of Marketing Nate Jorgensen noted the significance of this messaging and its anticipated impact on the campus community. Jorgensen stated, “Projects like these are a way for our community to create something that resonates with students and inspires them to come together and makes them feel as though they have a group or community specific to them here at Miami. I’m deeply proud of our team’s work on this and it was fun to see this development happen.”

This month, the RedHawks Pride logo was launched to the campus community in conjunction with LGBTQ+ Pride Month. As the logo continues to be utilized and integrated across campus, Ramirez is hopeful that the logo will continue to gain traction with the campus community. “This logo will be strategically used across campus to spotlight LGBTQ+ efforts and endeavors. We also hope to see this logo used in Miami University promotion; items and sticker decals so that community members can add them onto their laptops and other devices to show their RedHawks Pride!”

Submission for Inclusive Excellence Spotlight

Do you know a student, faculty member, or staff member who is doing standout inclusive excellence work? We are looking to highlight individuals on campus who are doing inclusive excellence work and making an impact on campus or in the community at large. Our goal is to highlight inclusive excellence works around campus and showcase the incredible work our community is undertaking.

[Submit your suggestions](#) for our next edition’s spotlight!



**Faculty Spotlight:
Queer and Trans Faculty
and Staff Association
(QTFSA)**

The Miami University Queer and Trans Faculty and Staff Association (QTFSA) is one of five current affinity groups designed to support employees through community building and resource sharing. These groups strive to create spaces of community, support, and networking for the Miami community through meetings, events, and other engagement opportunities through partnerships with offices, units, and campus stakeholders.

QTFSA’s main goal is to foster community building and provide affirming spaces for queer and trans faculty and staff at Miami. This is accomplished through events and establishing spaces to build relationships and networks to further a culture of belonging and inclusion. QTFSA has been operating since 2021, which was when current president Emily Cluen stepped into her role. The group previously existed as Gay Lesbian Employees at Miami (GLEAM). Cluen explained that, “As with many organizations that serve underrepresented populations, when people leave the institution, they often take knowledge of previous systems, processes, and resources with them. This has been much of the case with QTFSA’s founding and history; however, I am excited to have QTFSA in place now and to have the opportunity to create a stronger community for queer and trans faculty and staff.”

QTFSA operates under an executive board, who work to establish community and connection amongst LGBTQ+ faculty and staff across campus. This executive board currently has 5 members, including:

- Emily Cluen, Access Coordinator at the Miller Center for Student Disability Services
- Ben Williams, Assistant Dean of Students
- Bonnie Meyer, Visiting Assistant Professor, Educational Leadership
- Scott Sander, Associate Clinical Professor, Teaching Curriculum and Inquiry
- George Ricco, Associate Professor, Electrical and Computer Engineering
-

The executive board works to support and connect LGBTQ+ faculty and staff on campus by working to create a network of support both on and off campus. Cluen shared that the goal of QTFSA “has mostly been focused on community building and connecting with others. Our main goal is to help folks see connections on campus in what can often feel like a very isolating place. This includes serving as a connector between our membership and other queer things on campus, be it programming, initiatives, or working with offices directly.”

This summer, QTFSA will be involved with both the Hamilton and Cincinnati Pride celebrations. Hamilton Pride took place Saturday June 1 and included a parade through downtown Hamilton and a festival at Marcum Park. Cincinnati Pride will be on Saturday, June 22nd, including a march through downtown Cincinnati and a festival at Sawyer Point Park. Those interested in marching with other faculty, staff, and students at the upcoming celebration, are invited to fill out the interest form. Additionally, QTFSA is co-hosting a social event in collaboration with the 1809 LGBTQ+ Alumni Board on Friday, June 28th from 5-7pm. If you’re interested in attending, please register using the linked form.

As QTFSA continues to expand their membership and reach, Cluen and her executive team are excited to expand QTFSA involvement in policy change and advocacy for the LGBTQ+ community on campus. Faculty and staff that are interested in joining the Queer and Trans Faculty and Staff Association are encouraged to connect with President Emily Cluen or another executive team member, join the QTFSA listserv, or attend an upcoming pride event.



Staff Spotlight:
Mathew Hall
Associate Director for LGBTQ+ Initiatives
Center for Student Diversity and Inclusion

At Miami University, staff are dedicated to furthering inclusion and belonging. This dedication to inclusive excellence is often showcased through mentoring, research, and other programming and initiatives designed to provide students holistic support as they navigate their academic journey. One of these hardworking staff members is Mathew (Mat) Hall, Associate Director of LGBTQ+ Initiatives for the Center for Student Diversity and Inclusion (CSDI).



Mat Hall is a Miami University alum from the class of 2011. During his studies at Miami, Hall was involved with the student organization Spectrum, serving as a member, historian, and eventual president of the organization. As a part of Spectrum, Hall organized their drag shows and oversaw their production. Hall designed the shows to be a celebration of drag and philanthropy, as the shows at the time were a fundraiser to provide support for the Butler County Rape Crisis Center. Hall was also a student associate for the Women’s Center on campus and oversaw the women’s library and lactation space and wrote for [The Femellectual](#), also known as The Fem.

Upon the completion of his Bachelor of Arts Degree in Political Science and History, Hall went on to receive his Master’s of Education at Ohio University in College Student Personnel. Hall is currently pursuing a doctoral degree in the Interdisciplinary Studies Program at Miami University. Hall shared, “My research focus examines the experiences of queer and trans sexual assault survivors who are navigating university systems. One of my previous roles was actually in violence prevention, specifically focusing on the prevention of violence against queer and trans students, and sexual violence. The longer I have been in the field, the more these focus areas have merged for me and informed my goals.”

Hall returned to Miami as the Associate Director of LGBTQ+ Initiatives for the [Center for Student Diversity and Inclusion](#) in January of 2024. In this role, he works to create and maintain safe spaces for LGBTQ+ students and provides programming and initiatives to support Miami’s LGBTQ+ population further. When asked about his current position, Hall shared, “In many ways, being a student leader at Miami made me who I am fundamentally, and those experiences inform my ethos and values as a professional today. I love the growth in programming there has been since I was a student. As Associate Director of LGBTQ+ Initiatives, I plan to maintain our current programmatic offerings for LGBTQ+ students and I want to expand our outreach and programmatic offerings surrounding mental health and mentorship for our LGBTQ+ students.”

Currently, the Center for Student Diversity and Inclusion offers [LGBTQ+ initiatives](#) to foster a safe, equitable, and inclusive space for all students. This includes [support services and resources](#), hosting [Safe Zone trainings](#), and a wide range of [programmatic opportunities](#) to support community building and identity awareness within the Miami community. When asked about these offerings, Hall explained that “our goal is to create affirming spaces and provide systems of support for our students. Our programs and initiatives, like our QT Resiliency Workgroup and our new Queer Mentorship Program, work to further these goals and I am excited to broaden opportunities to expand our outreach efforts. Given the current social and political challenges facing our community, it is important that we invest in areas of well-being, mental health, and mentorship to improve retention and overall outcomes for our LGBTQ+ students. I am excited for the upcoming academic year and look forward to furthering our engagement with LGBTQ+ students on campus.”

Hall and his team, which includes Robby Specht, Assistant Director for LGBTQ+ Initiatives and Gender Equity, are currently looking ahead to the fall semester, and they encourage interested students to engage with their office for the latest updates on programmatic offerings. As Hall and his team continue their work to support inclusive excellence on campus, they encourage students to connect with their office by [following the CSDI Instagram](#) or [visiting the office website](#).

Submission for Inclusive Excellence Spotlight

Do you know a student, faculty member, or staff member who is doing standout inclusive excellence work? We are looking to highlight individuals on campus who are doing inclusive excellence work and making an impact on campus or in the community at large. Our goal is to highlight inclusive excellence works around campus and showcase the incredible work our community is undertaking. [Submit your suggestions](#) for our next edition’s spotlight!

Student Spotlight:
Amanda Kaufman
Graduate Student, SLAM



Student-athletes at Miami University are often faced with the challenging task of navigating multiple identities, be it student, athlete, developing professional, and a variety of other facets that inform their student experience. For LGBTQ+ student-athletes, there is often another layer of complexity added to the navigation of these intersecting identities. Graduate student Amanda Kaufman is currently examining how LGBTQ+ student-athletes navigate these intersecting identities through her masters’ thesis research titled, “Exploring Empowerment Amongst Intercollegiate LGBTQIA2S+ Athletes Through Photovoice Analysis.”

Amanda Kaufman is a second year master’s student in the Sports Leadership and Management (SLAM) program. Kaufman came to Miami University as a graduate of Bates College, where she was a double major in psychology and gender sexuality studies. At Bates College, Kaufman was a two-year captain and three-time All-American on the track and field team. She also completed two undergraduate theses in each of her respective majors focusing on women in sport and transgender athletes.

Kaufman is currently a member of the Miami University Track and Field team and is also a recipient of the [2023 National Collegiate Athletics Association \(NCAA\) Graduate Student Research Grant](#), which is funding her thesis research. When asked about the inspirations of her project, Kaufman explained, “Growing up in sports (equine and track) I had the opportunity to explore my identity and was able to be my most authentic self when I was on the field and with my teammates. As I got older and entered the collegiate level with track and field, I realized that for many of my teammates, athletics could be an inequitable space. One of my teammates was Andraya Yearwood, who is a prominent transgender student-athlete. Andraya’s experiences and obstacles in an inequitable system inspired me to conduct this research and explore ways to create a more inclusive environment in intercollegiate athletics for LGBTQ+ athletes.”

Kaufman’s research examines the lived experiences of LGBTQ+ NCAA student-athletes with a focus on the empowering or disempowering aspects of sports participation at the collegiate level. Her research is accomplished through photovoice analysis which asks participants to take photographs of their environment and/or aspects of their lived experience, and then the photographs are analyzed as data. Kaufmaun noted, “Photovoice allows participants to think about who they really are, and then capture and express that through a photograph. When participants take a photograph knowing it is for research, they must make specific decisions about how they want to represent themselves (Thomas, 2009). Photovoice thus gives agency and power to the participants. The focus of the study is improving the experience of LGBTQIA2S+ NCAA student-athletes so the sporting space is one in which all athletes may participate in a safe, authentic, and meaningful manner. The benefits of sports participation are vast in quantity and diverse in nature. These benefits should be accessible to all athletes regardless of who athletes are or who they love.”

While Kaufman is currently wrapping up the data gathering process, the data analysis phase of her project promises to yield recommendations of best practices and proposed policy changes for the NCAA. Kaufman explained, “I want to continue working towards a more equitable sporting space for all. I want all athletes to have the opportunity to find themselves and explore their identity through sports the way I was able to, and it is my hope that this research will further that goal.” Kaufman is excited to see the results of her project and for her participants’ efforts to culminate in tangible results for their fellow athletes.

As Kaufman works with her advisors to analyze participant data and determine conclusions, she is grateful for the support of her advisors and professors who have encouraged her along the way. “I am so thankful for the support of Dr. Maddox and Dr. Paskowitz. Their encouragement and guidance on this project was fundamental in my application and award of the NCAA funding and I am grateful for their guidance and support on this project.”

Currently, Kaufman is working to analyze her participant photovoice dataset and identify best practices and recommendations for the NCAA. To follow along with Kaufman’s project and to learn more about her data analysis and recommendations, or to inquire about this research, Kaufman invites you to [connect with her via email](#) or to [follow SLAM on social media](#).

Research Insights

Amanda Alexander, Professor and Chair for the Department of Art. College of Arts and Science.

Sharma, Manisha, and Amanda Alexander. The Routledge Companion to Decolonizing Art, Craft, and Visual Culture Education. Routledge, 2023.

Jennifer Blue, Ph.D., Professor and Associate Dean, Department of Physics.

Barthelemy, R. S., Traxler, A. L., Blue, J., and Swirtz, M., “Research on gender, intersectionality, and LGBTQ+ persons in physics education research,” in The International Handbook of Physics Education Research: Special Topics, edited by M. F. Taşar and P. R. L. Heron (AIP Publishing, Melville, New York, 2023), pp. 3-1-3-16.

Runcie C. W. Chidebe, Graduate Assistant, Department of Sociology and Gerontology.

Ashad-Bishop, K.C., Balogun, O.D., Chidebe, R.C.W. et al. Black voices in cancer research and oncology. Nat Rev Cancer (2024). <https://doi.org/10.1038/s41568-023-00662-7>
<https://www.nature.com/articles/s41568-023-00662-7>

Jennifer Cohen, Ph.D., Associate Professor, Department of Global and Intercultural Studies.

Cohen, J., van der Meulen Rodgers, Y. An intersectional analysis of long COVID prevalence. Int J Equity Health 22, 261 (2023). <https://doi.org/10.1186/s12939-023-02072-5>

Bruce Drushel, Ph.D., Professor and Department Chair, Department of Media, Journalism, and Film.

Bruce E. Drushel. (2023). Where Radio Dare Not Tread: Podcasts as Queer Audio Media. Radio Journal 21(1), pp. 67-81.

Bruce Drushel, Ph.D., Professor and Department Chair, Department of Media, Journalism, and Film.

Niu, L., Zhang, D., Shi, L., Han, X., Chen, Z., Chen, L., Wen, M., Li, H., Chen, B., Li, J., Su, D., & Li, Y. (2023). Racial discrimination and sleep quality during the COVID-19 pandemic: Findings from the health, ethnicity, and pandemic (HEAP) study. The Journal of Urban Health, 100, 431-435.
<https://doi.org/10.1007/s11524-023-00743-w> [Impact factor 5.801]

Katie Johnson, Ph.D., Professor, English Department Affiliate, Department of Global and Intercultural Studies.

Racing the Great White Way: Black Performance, Eugene O’Neill and the Transformation of Broadway. University of Michigan Press, July 2023. <https://press.umich.edu/Books/R/Racing-the-Great-White-Way2>

Anna Kłosowska, Ph.D., Professor; Department of French, Italian and Classical Studies.

“Western(ish): Periods and Maps.” H-France vol 15 (2023) issue 10 #8, Open Access, salon on periodization edited by Christine Adams and Charles-Louis Morand-Métivier. <https://h-france.net/Salon/SalonVol15no10.08.Klosowska.pdf>

Anna Kłosowska, Ph.D., Professor; Department of French, Italian and Classical Studies.

2023: SIT Amsterdam: International Perspectives on Gender and Sexuality
<https://newbooksnetwork.com/trans-historical>

Denise McCoskey, Ph.D., Professor; Department of French, Italian and Classical Studies.

Denise Eileen McCoskey, “Race, Roman Law Courts, and the Colonized Subject: Teaching Cicero’s Pro Fonteio,” in Diversity and the Study of Antiquity in Higher Education: Perspectives from North America and Europe, edd. Daniel Libatique and Fiona McHardy (New York and London:Routledge), pp. 47-60.

Racheal Rothrock, Ph.D., Assistant Professor; Literacy & Language Master’s Program Coordinator, Department of Teaching, Curriculum, amd Educational Inquiry.

Banda, R., Fernández, É., Aronson, B., & Reyes, G. (2023). “Apóyame o haste a un lado”: Composite Storytelling as Resistance During an anti-CRT Climate in Teacher Education. Thresholds in Education, 46(1).

We welcome your submissions and invite individuals to share publications from the past year to be highlighted in this section. To submit a recent publication, [please visit our website and complete our submission form](#).



Campus Announcements and Upcoming Events

Dr. M. Cristina Alcalde Named One of the Top Women Leaders of Ohio for 2024

Dr. M. Cristina Alcalde was named one of the Top 50 Women Leaders of Ohio for 2024 by Women We Admire. This honor recognizes women from the top industries in the state who are skilled and talented leaders in their field.

Dr. Alcalde was recognized for her strategic vision and leadership for a holistic, coordinated approach to inclusive excellence for faculty, staff, and students that she provides in her role as Vice President for Transformational and Inclusive Excellence. She was also recognized for her scholarship work, and has published widely and speaks nationally and internationally on inclusion, race and racialization, gender violence, migration, exclusion, belonging, and leadership.



Congratulations Dr. Alcalde on this well-deserved honor! We appreciate all that you do to make Miami University a more inclusive community.

Student Climate Interviews

You are invited to participate in a research project being conducted by the Office of Transformational and Inclusive Excellence (TIE). The purpose of this research is to understand the experiences of students as it relates to the campus climate both inside and outside of the classroom. We also want to identify additional programs, initiatives, and resources to support Miami students.

If you have any questions about the survey, please feel free to reach out to Cristina Alcalde (she, her, hers), Vice President for Institutional Diversity and Inclusion at pDiversity@miamioh.edu who is the Principal Investigator for the study.
[Sign-up for your interview today!](#)

Employee Stay Interviews

You are invited to participate in a research project being conducted by the Office of Transformational and Inclusive Excellence (TIE). The purpose of this research is to learn specific actions Miami University can take to strengthen the retention and overall climate for employees. We also want to identify strategies and resources needed to support Miami employees’ professional goals.

If you have any questions about the survey, please feel free to reach out to Cristina Alcalde (she, her, hers), Vice President for Institutional Diversity and Inclusion at vpDiversity@miamioh.edu who is the Principal Investigator for the study.
[Sign-up for your interview today!](#)

Celebrating Culture Through Music and Dance Friday, September 13, 5:30 - 8:30 p.m. Shriver Center, Heritage Room

In honor of Hispanic/Latinx Heritage Month, we invite you to immerse yourself in the rhythmic beats and movements of Latinx dance traditions. This event promises an evening of cultural exploration and energy. Participate in interactive dance sessions where you can learn steps and techniques from The Salsa Center. Learn Salsa, Bachata, and Samba. You will also experience dance performances from The Salsa Center.
[No experience is necessary—just bring your enthusiasm!](#)



Cincinnati Pride

Cincinnati Pride will be on Saturday June 22nd, including a march through downtown Cincinnati and a festival at Sawyer Point Park. If you are interested in marching with other faculty, staff, and students at either celebration, please [fill out the interest form](#).



REIMAGINING THE ACADEMY

Miami University, Kent State University, and Bowling Green State University have joined forces for the collaborative conference -: Reimagining the Academy. This year’s theme Coalition-Building in a Divided World builds on the success of the 2023 Reimagining the Academy Conference, which took place at Kent State University. Previously, each university held an annual conference on topics related to inclusive excellence. This alliance brings together the communities and expertise of the three universities, and is open to students, faculty, and staff across Ohio and beyond.

Focusing on the theme of coalition-building, the 2024 conference will explore how individuals can come together across disciplinary and professional borders as well as across positionalities and institutions to build on our strengths, discuss and develop spaces and strategies of resistance and support, and to learn from one another. We offer the theme of coalition-building as a form of radical hope and as a pathway to a more just world in our increasingly divided world.

Reimagining the Academy will take place Friday, Sept. 20th through Saturday, Sept. 21st at Miami University in Oxford, Ohio. Virtual engagement opportunities will also be available. Registration is free to faculty, staff, students, and alums, and community members.

We invite faculty, staff, students, and community members to join us at the Reimagining the Academy: Coalition-Building in a Divided World Conference, and to submit a panel, roundtable, paper, or workshop through the [Call for Proposals portal, which is now open](#). Deadline for submissions is Monday, June 3rd. For any additional questions, please reach out to atrconference@miamioh.edu. To receive up-to-date information regarding announcements, registration, and other important dates, please join the [Conference Listserv](#), and visit MiamiOH.edu/reimagining.

We look forward to having you join us for this very enriching experience.

M. Cristina Alcalde, Ph.D. (she/her/hers) Vice President, Office of Transformational and Inclusive Excellence Professor, Global and Intercultural Studies Miami University	Amoaba Gooden, Ph.D. (she/her/hers) Vice President, Division of People, Culture, and Belonging Professor of Africana Studies Kent State University	Katherine Stygles, Ph.D. (she/her/hers) Chief Diversity and Belonging Officer Bowling Green State University
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Capacity-Building and Leadership Development

Redhawks Equity Leadership Series (RELS)

- Be empowered! Be inspired to make transformative change. Complete a Redhawk Equity Leadership Series Certificate through our online sessions:
- A Road to Active Allyship
 - Inclusive Marketing
 - Introduction to Microaggressions
 - Leading with Racial Equity
 - Pronouns 101

Redhawk Equity Leadership Series (RELS), is a Diversity, Equity, and Inclusion is a FREE cultural competency certificate for students which is completely online and asynchronous. [Sign-up today to be a part of the spring cohort!](#)

Diversity, Equity, and Inclusion Leadership Certificate

Join our online Diversity, Equity, and Inclusion course and learn how to be an active ally, inclusive leader, and effective mediator. Extend your individual experiences and knowledge with research-based tools and strategies to thrive as an advocate for a more diverse, equitable, and inclusive world.

The DEI Leadership Certificate utilizes five foundational modules: (1) Bias, Stereotypes, and Microaggressions, (2) Race and Anti-Racism, (3) LGBTQ+ Identities, (4) Ableism and Inclusion, 5) Allyship and Advocacy.

Current registrants have until June 30th to complete their certificate modules. For more information, please visit [DEI in Leadership Certificate](#).

Religious Observances and Inclusive Scheduling

As we continue the spring semester, the Office of Transformational and Inclusive Excellence (OTIE) encourages all Miami community members to consult the full list of [Religious Observances and Inclusive Scheduling](#) dates on our website. To assist with planning, below we highlight a few key religious holidays and observances for the upcoming spring season, including a description of the holiday, best practices, and customary greetings. Please note that these are not all of the holidays that are taking place, nor is this a fully inclusive list.

June 16-17* - Eid al-Adha (Islam)

- **Description:** Eid al-Adha celebrates the Quranic tale of Ibrahim’s willingness to sacrifice Isamil as an act of obedience to Allah. It is also known as the feast of sacrifice. Many Muslims will celebrate Eid al-Adha by participating in prayers, mosque services, and exchanging greetings and gifts. The tradition for Eid al-Adha involves slaughtering an animal and sharing the meat in three equal parts. The meat is meant to be a good deed, and is meant to be shared with three groups: family, friends and relatives, and the poor.
- **Best Practices:** When providing food at functions, please consider foods that are Halal. We also recommend avoiding scheduling deadlines or activities on these days since this is a time of celebration and prayer.
- **Customary Greetings:** “Eid Mubarak” (MOO-bah-ROK) or “Happy Eid”

June 20 - Litha (Paga/Wiccan/Druid)

- **Description:** Litha (also known as Midsummer) occurs on the summer solstice, and celebrates the beginning of summer. The Summer Solstice celebrates the return of light, life and fertility as well as the potential for a good harvest. The day of the Summer Solstice is the longest day of the year in the Northern Hemisphere.
- **Best Practices:** Please keep in mind that many Pagan, Wiccan, and Druid practices are highly individualistic and vary from one observer to the next. While not all observers will take time off, devout observers may request time off in recognition of their individual practices.
- **Customary Greetings:** “Litha/Solstice Blessings” or “Happy Litha/Solstice”

August 13* - Tish B’Av (Judaism)

- **Description:** Tish B’Av is a day of mourning to commemorate many tragedies that have befallen Jewish people, many occurring on the ninth of Av. Tisha B’Av marks the end of the three weeks between dire straits and is regarded as the saddest day in the Jewish calendar, and it is thus believed to be a day which is destined for tragedy. The observance of the day includes five prohibitions, most notable of which is a 25-hour fast. The Book of Lamentations, which mourns the destruction of Jerusalem, is read in the synagogue, followed by the recitation of kinnot, liturgical dirges that lament the loss of the Temples and Jerusalem.
- **Best Practices:** Please consider the practice of fasting when scheduling any events, “lunch meetings,” or scheduling lengthy presentations. Not all will fast or take time off, but they may still observe in various ways. We also recommend avoiding scheduling deadlines or activities on these days since this is a time of mourning and prayer.
- **Customary Greetings:** It is customary to avoid greeting people on Tisha B’av, due to the solemn nature of the day.

Note: “*” denotes holidays that start sundown the day before. Please note that individual practices may vary.

We also encourage the use of our [Religious Observances and Inclusive Scheduling](#) calendar to provide guidance and help avoid scheduling important events, activities, and deadlines on holidays observed by members of the Miami community. Should you or a member of your team have any questions or concerns on how to best utilize this information or on appropriate accommodations, please contact the [Office of Transformational and Inclusive Excellence](#) or the [Office of Equity and Equal Opportunity](#).

- [Summer Observance Posters](#)

