Marcus Chen I WADA

+1 (313) 213-9941 • wadamc@umich.edu • ♠ wadamcl Lab Address: Tony England ELB, 2383 Richard Dr 1036, Dearborn, MI 48128

EDUCATION

University of Michigan-Dearborn, Dearborn, MI

Bachelor of Science in Computer Engineering

GPA: 3.97

SKILLS

- Controls & Embedded Systems: MATLAB/Simulink, STM32, Teensy, Arduino
- Programming Languages: Python, C++, C, JavaScript, SQL, LaTeX
- Version Control & Collaboration: Git, GitHub
- Development Tools: PyCharm, VS Code, Jupyter Notebook, PlatformIO, WebStorm

RELEVANT EXPERIENCES

Aug 2023 - Current

Research Assistant at UNIVERSITY OF MICHIGAN-DEARBORN, Dearborn

- Developed a GPU-cluster power simulator to evaluate grid safety and controls
- Designed and simulated plant models with full-state feedback controllers for distributed renewable energy systems

May 2027

- Configured and optimized a High-Performance Computing (HPC) node (SLURM) to accelerate control simulations and data processing
- Developed a web-based platform for interactive power outage data analysis, integrating a large language model (LLM) for accessibility
- Collaborated with faculty and community stakeholders to align control research with infrastructure resilience goals

Aug 2023 - Current

Airbrakes Lead, Michigan Aeronautical Science Association (MASA)

- Coordinated efforts across control design, CFD analysis, HIL testing, and hardware security research to ensure system robustness
- Designed and implemented a closed-loop airbrake control system to improve apogee accuracy for the 2025 International Rocketry Engineering Competition (IREC)
- Built a Python-based GUI to visualize trajectories and flight parameters for the 2024 Spaceport America Cup (SAC)

Jul 2024 - Current

Supplemental Instructor - General Chemistry & Calculus at University of Michigan-Dearborn, Dearborn

- Led weekly peer-learning sessions, guiding students through structured problemsolving strategies
- Created review materials and quizzes in collaboration with faculty to reinforce key concepts

Aug 2023 - Current

Treasurer, Math Club

- Secured \$2,000+ in funding to support competitions and colloquia
- Organized weekly preparation sessions for the Putnam Exam and regional math competitions

Jun 2019 - Jun 2022

Coffee Quality Grader & Spectrophotometer Technician at Blossom Valley Coffee, Taichung, Taiwan

- Calibrated and maintained Agtron Spectrophotometers
- Conducted coffee quality assessments through cupping sessions

LANGUAGES

ENGLISH (Fluent), PORTUGUESE (Fluent), MANDARIN (Conversational), SPANISH (Intermediate), FRENCH (Intermediate)