Mike Wang

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Software engineer with interests and experience running the gamut from microcontrollers and hardware to cloud and AI; from small startups to established companies. Building primarily with Python and Linux.

Education

Massachusetts Institute of Technology — Cambridge, MA
Master of Engineering in Electrical Engineering and Computer Science — *09/2019 – 09/2020*
Bachelor of Science in Electrical Engineering and Computer Science — *09/2015 – 06/2019*

Projects

Non-professional Tinkering — *05/2025 – Present*

- Taking some time off from working to travel, visit family and friends, and finish up longstanding personal coding projects. Visit mikemwang.com to view the full portfolio.

Experience

Akamai Technologies — New York, NY
Senior Software Engineer II — *03/2024 – 04/2025*
Senior Software Engineer — *08/2022 – 03/2024*

- Designed and implemented management tool for 10,000+ compute instances.
  Tools: Python, Celery, Salt, basic Linux system administration
  - Worked with SREs and other teams to understand existing manual processes and appropriate automations.
  - Developed concurrency model to parallelize tasks where possible, achieved up to 5x speed-up of common operations.
  - Part of company-wide cloud migration effort that reduced cloud costs by 40%.
- Developed internal AI chat assistant prototype.
  Tools: Python, Langchain, Langgraph, Langfuse
  - Researched existing AI system design patterns to leverage pre-built software and reduce iteration time.
  - Optimized software architecture to improve performance and reduce complexity.
- Continuously gathered requirements from stakeholders, developed new features, provided support, and solicited feedback.
- Mentored junior engineers through code reviews and pair programming.
- Created team onboarding materials, garnered 1300+ page views in 2.5 years.

OPT Industries — Medford, MA
Mechatronics Engineer — *11/2020 – 07/2022*

- Created and managed mission-critical Python and C++ code for the entire fleet of custom-built 3D printers.
  Tools: Python, Robot Operating System (ROS), C++, Arduino, Raspberry Pi
- Worked with design, production, and mechanical engineering teams to ideate and prioritize features and bug fixes.
  - Critical workflows were sped-up from over 30 minutes to a few seconds. Patent pending for the algorithms developed.
- Worked closely with vendors to evaluate new components and sensors, and to produce custom software drivers.
- Improved print quality, print speed, and machine reliability. In some cases, product pass rate increased from under 50% to over 90% and throughput was more than tripled.

MIT Software Design Group — Cambridge, MA
Research Assistant — *09/2019 – 08/2020*

- Investigated novel safety-assurance algorithms for self-driving cars, deployed code to physical autonomous vehicle simulator to validate results.
  Tools: Python, Robot Operating System

Patents

- **Certified control for self-driving cars.** Daniel Jackson, Jonathan Decastro, Soon Ho Kong, Nikos Arechiga Gonzalez, Dimitrios Koutentakis, Feng Ping Angela Leong, Mike Meichang Wang, and Xin Zhang. United States Patent #11745732. September 2023.