

Tom Krolkowski

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EDUCATION

Ph.D. Computer Science and Engineering, *University of Michigan* Aug 2022 — Present
Advisor: Alanson Sample
B.S.E. in Computer Engineering, *University of Michigan* Jan 2020 — Apr 2022

TECHNICAL EXPERIENCE

Software Development Engineer Intern Jun 2021 — Aug 2021
Amazon Web Services Seattle, Washington

- Implemented an SQS Poller Lambda application, allowing the team to remove the existing code from the main application. Overall improving time complexity and reducing the cost by using serverless AWS Lambda functions.
- Used reserved concurrency to increase the application speed, overall processing 6 million SQS queue messages in 15 minutes.
- Created unit tests and integration tests to evaluate the functionality of the application before deploying it to production

Toyotetsu North America Aug 2017 — Jan 2020
Design Engineer Northville, Michigan

- Responsible for coordination between engineering and manufacturing for value added projects that include: waste reduction, material changes, design changes, or system changes.
- Review, evaluate, and execute product changes to meet new requirements, improve performance, quality or cost reduction.
- Responsible for negotiating design change requests, schedules, stamping processes, and blank sizes with Toyota during the design phase.

Conti Fire Protection Mar 2016 — Aug 2017
Fire Protection Design Engineer Sterling Heights, Michigan

- Designed and fabricated numerous systems including wet systems, dry systems, and high hazard industrial systems.
- Analyzed water flow using hydraulic calculations to accurately model the velocity and pressure required to extinguish a fire.
- Pioneered a new method of 3D modeling mechanical rooms to increase productivity in labor and reduce material costs.

SKILLS

Programming Languages C/C++, Python, Java, \LaTeX , ARM Assembly, System Verilog, JavaScript, CSS, HTML
Toolkits MATLAB, Simulink, Stateflow, NumPy, SciPy, PyTorch, OpenCV, SciKit-Learn, Fusion 360, Altium