Peter Jochem

Software Engineer

(414) 312-1186
peterpennrichjochem@gmail.com
Columbus, OH
LinkedIn

SUMMARY/OBJECTIVE

I am a software engineer with a broad range of experiences in computer science, machine learning and robotics. I want to leverage my engineering and computer science background to craft high-quality software solutions. With four years of work experience at startups, I am excited about working in a fast paced, dynamic environment where ICs often need to wear many hats and work directly with people outside of their team.

WORK EXPERIENCE

Software Engineer

Path Robotics | **Columbus, Ohio** | **2022 – 2024**

- Developed software for autonomous welding robots. Developed optimization algorithms to place a series of weld beads in a seam to achieve structural requirements. Worked with Python and C++.
- Spearheaded design and deployment of MLOps infrastructure, defining model training processes and deployment strategies. Engineered tools that standardized model training procedures, facilitated experiment tracking, and streamlined model distribution across a fleet of production robots. This initiative resulted in a 20% reduction in the team's support responsibilities.
- Reduced runtime of multi-pass adaptive fill service by 80%, enabling handling of larger fill planning problems. This work allowed the company to venture into new lines of business, particularly focusing on larger parts.
- Ensured delivery of high-quality software solutions by adhering to best practices in coding, testing, and documentation. Increased test coverage of multi pass adaptive fill service by 40%. Conducted rigorous testing procedures on real robotic hardware to validate system changes and enhancements.

Robotics Software Engineer

Chef Jasper | **Montreal, Canada** | **2020 – 2022**

- Developed Python and C++ software for robotic kitchens. Fourth full time employee.
- Improved dispensing algorithms. Reduced benchmark dispensing error by 28%.
- Designed and implemented hardware and software infrastructure for robots to learn to dispense.
- Collaborated with academics to implement operations research algorithms to reduce cooking times by over 40%.
- Wrote clean code, tests, and docs. Tested changes on real robotic hardware

SKILLS

- Python, C++, CUDA, AWS, ROS, Cloud Infrastructure, Computer Vision, Robotics, ML Deployment at Scale, Software Engineering Best Practices, Test Driven Development (TDD), CI/CD, Machine Learning, Data Science, ML Automation, Deep Learning, System-Level Software, GPU Resource Optimization, PyTorch, Profiling, Data Structures, MLOPs, Motion Planning, Communication of Highly Technical Topics, Bash, Git, numpy, Docker, REST APIs, Relational Databases, NoSQL.

EDUCATION

Name of School: Northwestern
Degree: Masters
Major: Robotics
GPA: 3.8
Years: 2019 - 2020

Name of School: University of Wisconsin
Degree: Bachelors of Science
Major: Computer Science
GPA: 3.9
Years: 2015 - 2019