

WORK EXPERIENCE

Technical Product Manager – Superpedestrian

April 2021 - Feb 2022

- Specified, prioritized, and scheduled work across three teams to deliver a cross-functional new piece of technology which integrated proof-of-concept research into existing intelligent vehicle platform
- Led new product introduction process of high accuracy location technology from company partner acquisition through system integration, resulting in winning high-value permit to operate in Chicago, IL.
- Translated problem statements from operations teams into feature specifications such that engineering teams were able to ship critical efficiency and reliability improvements in a timely manner

Embedded Systems Test Engineer – Superpedestrian

Feb 2020 - April 2021

- Developed hardware-in-the-loop (HIL) fixture and software tests for vehicle platform thereby increasing fault injection and stability test coverage by over 10x and reducing number of bugs released to the field
- Built manufacturing test log database, data pipeline, and tooling from scratch, enabling 35% cycle time reduction on embedded electronics manufacturing line, amongst many other use-cases
- Designed and specified manufacturing test fixture that enabled offline firmware updates during final assembly to streamline communications and troubleshooting processes with manufacturing partners in China
- Managed vehicle firmware release process that included performance field testing and validation, engineering change order documentation, and education of operations teams on feature set changes

Technical Sales Intern – Keyence America

Jun 2019 - Aug 2019

- Generated 30+ sales leads for technical industrial automation products using a proprietary customer relationship management (CRM) system resulting in over \$120,000 in sales for vision-based sensors and laser markers
- Assisted sales engineers during various in-person sales calls, product demonstrations, and technical support for high precision measurement tooling

Lead Research Assistant – Center for High Performance Power Electronics

Jun 2018 - Aug 2018

- Directed undergraduate research team in designing and building a real-time cyber-physical power grid testbed for cyber attack analysis and defense strategy development
- Published research¹ in IEEE Xplore via the North American Power Symposium

Product Development Engineering Intern – Tech4Imaging

Sep 2017 - Nov 2017

- Designed and operated test equipment for novel 3D imaging technology (electrical capacitance volume tomography) technology for use in non-destructive testing and multi-phase mass flow measurement
- Conducted various experiments determining empirical relationship between capacitance and liquid volume

Engineering Intern – GE Aviation

Jan 2017 - May 2017

- Mapped value stream of aircraft electronics component to identify and implement cycle time reduction methods, resulting in time savings of \$1000 per cycle of medium volume product
- Redesigned facility floor plan according to Lean manufacturing principles to improve efficiency by removing need for products to traverse a large facility multiple times during assembly and test

SKILLS

Product Management

Roadmap management, Jira, Confluence, Agile/scrum, product requirement documents (PRD), business case development, user stories, stakeholder engagement, technical documentation, timeline organization, feature prioritization

Technical

Python, Git/Github, Jenkins CI/CD, MATLAB, object oriented programming (OOP), scripting, MongoDB, data exploration, test specifications, microcontrollers, predictive analytics (ML/AI), prototyping, electronics bench equipment, sensor fusion, controls algorithms

EDUCATION

The Ohio State University

GPA: 3.59/4.00

B.S. Electrical Engineering (Controls), with Honors Distinction

Minor: Environment, Economy, Development, and Sustainability

1. Z. O'Toole et al., "A Cyber-Physical Testbed Design for the Electric Power Grid," 2019 North American Power Symposium (NAPS), 2019