

## SUMMARY

As a competent generalist who is not afraid to dig into the details while maintaining focus on the bigger picture, I am looking to use my skills to improve lives and achieve further sustainability goals with technology.

## SKILLS

### Product and Project Management

Roadmap management, team bring-up, feature and process definition, Jira, Confluence, Agile/scrum, Jama, product requirements documents (PRD), stakeholder engagement, technical communication and documentation, vendor evaluation, OKR/KPI metric definition and tracking

### Engineering and Technical

Python, Git/Github, Jenkins CI/CD, MATLAB, object oriented programming (OOP), embedded systems, robotics, discrete-event simulation (DES), MongoDB, exploratory data analysis (EDA), test specification, predictive analytics (ML/AI), 3D printing, microcontrollers (I2C, SPI, UART, WiFi, MQTT, IMU, GPS/GNSS, LoRa), soldering, prototyping, bench equipment (oscilloscope, waveform generator, power supply), Solidworks, LabVIEW, sensor fusion, controls algorithms

## WORK EXPERIENCE

### Product Manager – [DroneUp](#)

September 2022 - March 2024

**Key Achievement:** Defined requirements and coordinated work between design agencies and vendors to develop automated UAV takeoff and conveyance system to improve throughput for drone-based operations

- Drove aircraft hardware modification projects to improve delivery package stability and dropoff success, *resulting in a 50% increase in delivery success rate*
- Developed discrete-event simulation environment using Python with GUI to better understand drone delivery operations at scale, thus *enabling key decision-making without costly investment and experimentation*
- Created and implemented team structure, standards, and best practices for a new team

**Career Break** – *Pursued opportunity to build camper trailer and solo travel through the western United States*

### Product Manager, Embedded Systems and R&D – [Superpedestrian](#)

April 2021 - Feb 2022

**Key Achievement:** Integrated sensor-fusion technology into intelligent vehicle platform to deliver high-precision, low-cost localization technology, resulting in winning high-value permit to operate in Chicago, IL

- Translated problem statements from operations teams into feature specifications, thereby improving vehicle downtime and profit margins by 30%
- Communicated complex topics to non-technical teams to improve accuracy and clarity of marketing materials and technological expectations to external stakeholders and internal partners

### Embedded Systems Test Engineer – [Superpedestrian](#)

Feb 2020 - April 2021

**Key Achievement:** Developed hardware-in-the-loop (HIL) fixture and software tests for vehicle platform, increasing fault injection and stability test coverage by over 10x and drastically reducing release defects

- Built manufacturing test log database, data pipeline, and tooling for analysis, *enabling 35% cycle time reduction on embedded electronics manufacturing line* amongst many other use-cases
- Upgraded test report analytics to improve data consumption and debugging capability of engineering teams to reduce time-to-market for new features
- Designed and specified manufacturing test fixture to enable offline firmware updates during final assembly
- Managed vehicle firmware release process that included performance field testing and validation, engineering change order documentation, and education of operations teams on feature set change

## EDUCATION

The Ohio State University – B.S. Electrical Engineering, with Honors Distinction (3.60/4.00)

**Domain:** Control Systems

**Minor:** Environment, Economy, Development, and Sustainability (EEDS)

**Projects:** LiDAR autonomous model car, autonomous “spaceport” robot, mesh-sensor network for precision agriculture

**Activities:** Electronics Club (President), OHI/O Hackathons (Chairman, participant), Model Smart City Design Team