
EXPERIENCE**Ouster (San Francisco, CA) | Technical Product Manager**

November 2017 - Present

- Leads product team of 3 full time and contract employees responsible for Ouster's OS0, OS1, and OS2 lidar sensors as well as Fleetguide, the first after-market, lidar-based, commercial vehicle safety product.

OS0, OS1, and OS2 Digital Lidar Sensors

February 2020 - Present

- Maintains and prioritizes the roadmap for Ouster's digital lidar portfolio, conducting user research to understand the global needs of Ouster's 600+ customers, developing feature specifications for Engineering, and defining hardware and firmware releases.
- Defines the technical specification for Ouster's next generation lidar system, coordinating requirements from Business Development, Engineering, Manufacturing, and Reliability leadership.

Fleetguide Collision Avoidance System

November 2017 - Present

- Created the initial product strategy and coordinated with Engineering, Manufacturing, and Customer Success leads on MVP development and deployment from early concept, through pilot launch, and first revenue.
- Leads the MVP feature development consisting of lidar visualizations via a driver display and fleet manager web dashboard, resulting in multiple successful deployment expansions with initial pilot customers.
- Coordinates with Machine Learning and Data Platform team leads on the definition and development of lidar-based perception algorithms to increase driver and fleet manager situational awareness.
- Developed and maintained software tooling (primarily python) for ODM verification of hardware and embedded systems, system provisioning and deployment, and system status/debug tooling for field technician team.

United States Marine Corps (Camp Lejeune, NC & Fort Meade, MD) | Intelligence Officer

August 2011 – November 2017

- Led, trained, and mentored multiple cross-functional military and civilian teams ranging from 8 to 14 individuals in support of joint training and counterterrorism operations with foreign militaries.
- Served as the primary Technical Program Manager for the largest DOD led cyberspace operation tasked with conducting detailed tactical planning and executing cyberspace missions recognized by national leadership as the model for integrated combat operations.
- Conducted a detailed analysis of a high priority counterterrorism target and used the analytical product to design and present an innovative strategic plan to stakeholders including the National Security Council.
- Categorized and measured key performance indicators to improve the operational effectiveness of cyberspace missions in support of President-level national security objectives.
- Led the ideation, technical development, and testing of multiple unmanned aerial system proof of concept experiments addressing current capability gaps with open source hardware/software that was used to drive future system procurement and Marine training.

EDUCATION**Massachusetts Institute of Technology (Cambridge, MA) | M.S. Mechanical Engineering**

Sep 2009 – Jun 2011

- Thesis: Autonomous navigation and tracking of surface targets utilizing an aerial vehicle; developed computer vision and state estimation algorithms to integrate GPS, IMU, and computer vision measurements into multiple control systems.

United States Naval Academy (Annapolis, MD) | B.S. Systems Engineering (Honors)

Jun 2005 – May 2009

- Trident Scholar: 1 of 8 selected for independent research - UAV distributed control algorithm (UMD/Naval Research Lab.)

ROBOTICS AND VOLUNTEERING

- Autonomous RC Car ([ML+ lidar & camera navigation, mapping, odometry](#)), UAV ([3D mapping & navigation, control system design](#))
- *Seraph*: created a dance/robot piece with Grammy nominated modern dance company Pilobolus (20 shows, 8,000+ people)
- Volunteered for: Wilmington FIRST Robotics Team Mentor, DC Drone Users Group, DIY Robocars DC Extension
- Published in: *Ouster.com blog, Yahoo! Finance, Proc. Of the ACRA, Marine Corps Gazette, Small Wars Journal, CIMSEC.org*
- Skills & Tools: JIRA, Confluence, Zeplin, Airtable, Figma, Dovetail, C, Python, TensorFlow, OpenCV, ROS, MatLab,

AWARDS AND HONORS

- U.S. Marine Corps Intelligence Unit of the Year (2017); U.S. Marine Corps Innovation Challenge Semi-Finalist (2017); Botsker Award for Best Robot Actor, Robot Film Festival NYC (2012); Signals Intelligence Officer Course Distinguished Graduate: 1 of 13 (2012); USNA Colt Award: 1 of 90 in major (2009); Tau Beta Pi Fellow: 1 of 30 in U.S. (2009)