

Tyler Seiden Sherman

TylerSSherman98@gmail.com | (914) 826-7625 | <http://tyler-s-sherman.com/>

WORK EXPERIENCE

Alarm.com, Tysons, VA

Technical Product Manager III – Video

June 2023 – Present

- Lead end-to-end development of outdoor cameras, including Alarm's projected highest-volume SKU. Craft user stories, conduct competitive analysis, define roadmaps, and develop comprehensive technical specifications/PRDs.
- Oversee the NPI process, managing schedules and transitions through production milestones (EVT, DVT, PVT, MP, FCS) and test phases (Alpha, Beta, LA, GA) with cross-functional teams, vendors, and ODMs/CMs.
- Manage ongoing product quality by investigating hardware and software issues and implementing corrective actions.
- Architected a credential provisioning scheme and Bluetooth framework, enhancing security and the user experience.
- Researched AI-based audio analytics, video codecs, audio codecs, LoRa, and Matter to shape product strategy.

SpaceX, Hawthorne, CA

Electrical Engineer II, Life Cycle Avionics

December 2021 – May 2023

- Responsible Engineer for fault-tolerant, mixed-signal avionics for Falcon and Dragon including cameras, FTS units, and RIOs with Ethernet, RS422, RTDs, 4-20mAs, valves, and pyros. Managed all phases of the product life cycle.
- Led two Falcon Flight Computer redesigns that eliminated common defects, enhanced manufacturability, and improved testability. Achieved 5x increase in FPY, 4x increase in monthly output, and 75% reduction in lead time.
- Drove 15+ change tickets and 5+ risk tickets to closure, significantly enhancing vehicle capabilities and reliability.
- Investigated and resolved failures at the component, unit, vehicle, and process levels. Directed support teams, performed bench testing, assessed risks, briefed stakeholders, and implemented effective solutions.
- Spearheaded Design for Excellence (DFX) initiative, improving manufacturability, reliability, testability, and procurement of flight avionics. Implemented and reviewed changes to electrical schematics, PCB layouts, and mechanical drawings. Improved efficiency and organization of design updates, doubling the YOY release rate.
- Authored three avionics specifications for PCB/A releases, design unit documentation, and approval requirements.
- Proficient in standards including SMC-S-016, RCC 324-11, AFSPCMAN 91-710, EEE-INST-002, and IPC-6012.

Electrical Engineer I, Life Cycle Avionics

June 2020 – December 2021

- Redesigned, qualified, and integrated a GPS LNA into the Falcon RTS, improving reusability and operating range.
- Implemented an in-house design to replace COTS connectors, achieving over \$2M in annual savings.
- Addressed part shortages and obsolescence for Falcon and Dragon avionics, ensuring on-time builds with no delays.
- Led testing and certification for Falcon RTS 10x and 20x reuse campaigns in coordination with the FAA and USSF.
- Increased production rate by triaging nonconformities and collaborating with Planning, Manufacturing, and Test.
- Developed a SQL-based product documentation template that improved the accuracy and accessibility of data.

Cornell University Space Systems Design Studio, Ithaca, NY, *Researcher*

February 2018 – May 2020

- Designed, built, tested, and launched two 3U+ CubeSats on Virgin Orbit's LauncherOne for the PAN mission.

TECHNICAL SKILLS

Product	Market Analysis, Product Strategy, User Stories, Product Requirements, UX Design, User Testing
Hardware	Schematic Capture, PCB Layout, DFM/DFX, Derating, Root Cause Analysis, Environmental Testing
Programming	Python, SQL, Bash, MATLAB, HTML, Git, API Development, Agile Methodologies
Tools	Altium, SiliconExpert, Jira, Confluence, Power BI, Teamcenter, Microsoft Office, Figma

EDUCATION

Cornell University, Ithaca, NY

Master of Engineering, Electrical & Computer Engineering

GPA: 4.080

Bachelor of Science, Electrical & Computer Engineering

GPA: 3.881

Programs: Computer Science Minor, Dyson Business Minor for Engineers, Engineering Leadership Certification

Honors: Magna Cum Laude, Dean's List (6/7 semesters), Eta Kappa Nu (IEEE-HKN), Tau Beta Pi