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

- Drove the end-to-end product development for a next-generation video device. Collaborated with engineering, marketing, and support teams to ensure market fit, competitive pricing, timely delivery, and robust quality.
- Led full-stack development of a Bluetooth setup feature, reducing support calls and streamlining device onboarding
- Designed a new security architecture and service for provisioning credentials during manufacturing to proactively mitigate vulnerabilities and enable new communication protocols (MQTT, BLE)
- Spearheaded research initiatives for AI-based audio analytics, audio and video codecs, LoRa, and Matter to understand the technologies, monitor market trends, and shape product strategy
- Collaborated with cross-functional teams to design and implement a standard process for technical documentation across firmware and platform APIs, accelerating engineer onboarding and decreasing development time
- Championed enhancements to existing products based on evolving market needs and stakeholder feedback

SpaceX, Hawthorne, CA

Avionics Product Engineer II

December 2021 - May 2023

- Provided extreme technical ownership and product management for fault tolerant, mixed signal avionics across all phases of the product life cycle including Flight Computers, Flight Termination System (FTS) units, and RF devices
- Designed high reliability hardware to expand capabilities and performed benchtop validation testing
- Triaged production nonconformities, root caused anomalies, and conducted environmental qualification campaigns
- Led the Design for Excellence (DFX) initiative to improve the procurement, manufacturability, and reliability of all flight avionics, spanning from piece parts and PCBs through PCBAs and electromechanical assemblies
 - Implemented and reviewed changes to electrical schematics, PCB layouts, and mechanical drawings
- Developed new processes to increase efficiency and organization of design updates, doubling YOY release rate
 Avionics Product Engineer I
 June 2020 December 2021
 - Designed and certified a high reliability, reusable GPS LNA to replace a COTS unit, reducing costs by 70%
 - Devised and executed plan to replace COTS connectors with an in-house design, saving over \$2M annually
 - Drove process to identify and resolve component issues caused by shortages and obsolescence for all flight parts
 - Restructured product documentation with SQL automation to improve accuracy and increase data accessibility

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

ProductMarket Analysis, Product Strategy, User Stories, Product Requirements, UX Design, User TestingHardwareSchematic Capture, PCB Layout, DFM/DFX, Derating, Root Cause Analysis, Environmental TestingProgrammingPython, SQL, Bash, MATLAB, HTML, Git, API Development, Agile MethodologiesToolsWavefront, Figma, Altium, SiliconExpert, Jira, Confluence, Power BI, Teamcenter, Microsoft Office

EDUCATION

Cornell University, College of Engineering, Ithaca, NY Master of Engineering, Electrical & Computer Engineering

Cornell University, College of Engineering, Ithaca, NY

Bachelor of Science, Electrical & Computer Engineering

GPA: 3.881

GPA: 4.080

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