Stephen Grenesko

(412) 925-5409 | srgrenesko@gmail.com

SUMMARY

Electronics specialist and engineering technician with 7+ years of combined experience in fabrication facility oversight, safety compliance, and technical instruction across military, academic, and industrial environments. Proven expertise in managing multi-technology makerspaces, supervising personnel, implementing safety protocols, and supporting hands-on educational programs. Skilled in operating and maintaining CNC machines, 3D printers, laser cutters, and electronics instrumentation while fostering collaborative learning environments and ensuring regulatory compliance.

EDUCATION

University of Pittsburgh   **Sep 2020 - Apr 2025**
B.S., Computer Science, Minor in Physics

Community College of the Air Force   **Feb 2020 - Aug 2023**
A.S., Applied Science

WORK EXPERIENCE

Mine Vision Systems   **May 2025 - Present**
Hardware Engineer Technician - Pittsburgh, PA
- Executed functional electronics testing and rework on LIDAR range finder and computer vision technologies, enhancing system reliability and reducing electromechanical faults across 50 field units.
- Engineered and constructed testing fixtures to evaluate LIDAR unit degradation and cable connectivity, accelerating hardware debugging processes by 35% from previous testing procedures.
- Built prototypes of a hardware peripheral expansion board for unit testing, contributing to iterative design improvements for Mine Vision Systems' second generation product.

University of Pittsburgh   **Aug 2022 - Aug 2025**
Electronics Prototyping Specialist - Pittsburgh, PA
- Managed makerspace facility operations ensuring safety compliance and regulatory adherence across prototyping workspaces serving 200+ undergraduate students per semester
- Supervised daily operations of fabrication equipment including 3D printers, CNC machines, laser cutters, and soldering workstations, maintaining operational uptime through preventive maintenance and vendor coordination
- Designed and delivered workshop series on microcontroller development, circuit design, and lab safety, training students, staff, and faculty on equipment operation and material handling best practices
- Partnered with faculty to support lab-based courses and capstone projects by providing technical guidance, one-on-one mentoring, and class-level demonstrations
- Developed electronic prototyping infrastructure and standard operating procedures that enhanced embedded systems design capabilities and fostered collaborative engineering environment

Pennsylvania Air National Guard   **Sep 2018 - Aug 2025**
Aircraft Structural Technician - Pittsburgh, PA
- Operated precision machining equipment to fabricate custom hardware components for aircraft structural repairs, ensuring compliance with military specifications and quality standards
- Managed tool room inventory and machine shop equipment for 15-person maintenance squadron, maintaining accountability systems and coordinating equipment calibration schedules
- Implemented Lock Out/Tag Out safety program across shop operations, reducing safety incidents and establishing standardized hazard prevention protocols
- Completed leadership development training in personnel management, operational planning, and Air Force safety standards

SKILLS

- **Lab Management & Safety**: Safety protocols, Regulatory compliance, Lab supervision, Facility management, Budget management, Equipment maintenance, Training and instruction, Multi-task coordination, Organizational skills
- **Fabrication & Manufacturing**: 3D printers (FDM/SLS), CNC machines, CNC Milling/Machining, Laser Cutting/Engraving, Power tools, Rapid prototyping, Electronics workstations, Soldering rework, Sheet metal fabrication, woodworking
- **Embedded Systems/Hardware**: Electronics design, Hardware validation testing, LiDAR sensor modules, Arduino microcontroller development, Raspberry Pi systems design, Embedded prototyping, Electromechanical assembly repair, I2C protocol validation, UART communication, Circuit design, Thermal testing, Breadboarding, Technical documentation
- **3D CAD and PCB Design**: Altium, Fusion360, Solidworks, EasyEDA, PCB layout/revision, Mechanical design