

Quinlan Smith

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EDUCATION

Lehigh University, Bethlehem, PA

Graduation: May 2026

BS, Mechanical Engineering

Minor: Philosophy, Aerospace Engineering

RELEVANT EXPERIENCE

Engineering Intern | San Clemente, California

Reyn Speed Shop

June - August 2025

- Designed and tested for **intake runners** and **vacuum distribution** blocks in 70s BMW electronic fuel injection kits
- Tuned 4-cylinder engines using **Link EFI control systems**, resulting in increased horsepower, torque, and throttle response over the outdated carbureted design
- Rewired sensors, machined components, and redesigned parts in CAD, ensuring full system functionality
- Represented Reyn Speed Shop in the premier launch of the R4S injection system at Monterey Car Week's Legends of the Autobahn, driving brand visibility and market presence
- Used **Markforged 3D printers** to aid in prototyping various components for R4S

Auto Technician | Baltimore, MD

Charing Cross Car Care

Summer 2022 - 2024

- Diagnose, repair, and maintain complex automotive systems, including engines, transmissions, electrical, and **computer-controlled components**, while performing precision rewiring and ensuring vehicles meet safety, performance, and customer satisfaction standards

INDEPENDENT PROJECT

Drone Enthusiast

- Designed, built, and optimized multiple **FPV quadcopters** ranging from freestyle to competitive racing platforms
- Engineered, manufactured, and tested **carbon fiber frames** as well as 3D-printed structural components from initial concept to flight-ready integration
- Developed a custom 3-inch quadcopter meeting **sub-250g regulatory standards** while maximizing power-to-weight performance for racing
- Calibrated and tuned advanced **PID control loops** to achieve precise handling and stability

Car Enthusiast

- Restored and rebuilt four high-performance vehicles, BMW E46, Honda S2000, Mazda FD RX-7, and Mazda Miata
- Integrated **Haltech ECU systems** with rotary engines, achieving up to 200% performance gains
- Currently designing a Formula-style race car powered by a high-output motorcycle engine.

Rotary Engine Specialist

- Fabricated custom components for racing applications, including intake, exhaust, and fueling enhancements.
- Collaborated with rotary performance communities and workshops to share technical knowledge, refine builds, and benchmark results against competitive standards

CAMPUS INVOLVEMENT and ACTIVITIES

LU Car Club Vice President, Philanthropy Chair, and Shop Organizer

August 2022 - Present

- Teach basic car repair to students and members of the community
- Attend meets and organize events in the Lehigh Valley area car community.

Formula SAE Powertrain

- Completed wiring harness manufacturing for the **Formula SAE** Racing Team
- involved with dynamometer testing and tuning of the Formula SAE engine, as well as engine development

LISENCES AND CERTIFICATIONS

Private Pilot

Fredrick Flight Center

- Completed over 115 hours flying single-engine aircraft like Cessnas and Citabrias

PADI Scuba Certified

- Completed all required dives and dive hours and received scuba certification

TECHNICAL SKILLS and LANGUAGE PROFICIENCY

Coding and Software: Proficient in Python and Matlab as well as Solidworks, MasterCam, Rapid Harness, and Abequs

Special interests: Guitar player for 15 years, avid fisherman, amateur cinematic drone pilot, Wenkel engines, formerly sponsored skateboarder, snowboarder.