

George Lin

georgelin.dev | geolin735@gmail.com | (412) 304-2844 | linkedin.com/in/george-lin | github.com/georgel735

EDUCATION

Vanderbilt University

Expected Graduation: May 2029

B.E. in Computer and Electrical Engineering; B.A. in Mathematics

GPA: 3.906

- Clubs/Activities: Vanderbilt Motorsports, Vanderbilt Robotics, Vanderbilt ISIS, Vanderbilt Climbing

EXPERIENCES

Titanium Titans

August 2023 - July 2025

Main Programmer

Canonsburg, PA

- Developed advanced robot control systems using Java programming and swerve drive implementation, utilizing Phoenix Tuner X for precise motor calibration and optimization
- Implementing I/O interfaces for AdvantageKit, utilizing the open-source logging and telemetry framework to enable comprehensive data collection and replay functionality for 12+ robotic subsystems
- Programmed 10+ autonomous routines with PathPlanner and Choreo, optimizing robot movements and decision-making algorithms for competitive advantage
- Worked with heavy, operational machinery. Developed electrical systems and diagnosed electrical issues. Led and assembled subsystems from prototyping stage
- Led and trained underclassmen to finalist finish at Greater Pittsburgh Regional
- Led scouting team, analyzing 100+ matches and hours of video data to develop match strategies and compile comprehensive team performance reports for scouting meetings

RELEVANT PROJECTS

Aoide | Tethys | Oceanus

- Hyperion: Programmed tank drive, flywheel shooter, and intake-magazine controls. Calibrated PID controls for shooter and drivetrain through Limelight camera and Shuffleboard
- Aoide: Machined parts on CNC router and mill. Stripped, crimped, soldered, and connected wires. Programmed controls for virtual 4-bar arm, autonomous routines, and chainlock climber
- Tethys: Designed, machined, and assembled support blocks. Mounted, wired, and incorporated object detection cameras. Managed CAN wire for CANbus and roboRIO circuit
- Oceanus: Assembled one stage elevator, ground to funnel intake, and swerve drive system. Managed wiring system from subsystems to Power Distribution Hub. Programmed autonomous routines, swerve drive, and elevator controls for world championship qualifying robot

TECHNICAL SKILLS

Languages: Java, Python

Developer Tools: Git, IntelliJ

Hard Skills: Mechanical Fabrication, Embedded Systems

LEADERSHIP

Quaker Valley VEX Robotics

August 2023 - July 2025

Founder

Leetsdale, PA

- Founded competitive robotics program, established team infrastructure, managed all organizational activities, and secured long-term school support
- Drove 100% of robot design strategy and execution, implemented control systems through Python, and mentored team members throughout every stage of development
- Raised and managed \$6,000 in funding and grew team to 10+ members through recruitment and outreach

More information and full software and mechanical project writeups available on my portfolio: <https://www.georgelin.dev>