

Robert “Bobby” Barton

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Education

Lamar University

Expected May 2026

Bachelor of Computer Engineering

GPA: 4.0

Scholarship – Joe Tonahill SETX Legends Full-Ride – Beaumont Foundation of America

Work Experience

- **Robotics camp counselor.** Helped teach students how to work with each other in teams to communicate and build their ideas *July 2023*
- **Front-End development** for Nehemiah Prayers app using Svelte.js, and *Summer 2022*
learned how to use GitHub

Projects

Robotic Cardinals Vice President:

Spring 2024 – Present

- **Cofounder** of the CARDS program (Collegiate Advocates for Robotics Development in Schools) which promotes and assists the growth of Competitive Robotics programs in local high schools
- **Captain and Programming Lead** of Lamar’s first VEX U robotics team. Designed robots in the CAD software, Onshape, 3d printed mechanical components, and programmed an autonomous motion control algorithm in C++ using sensor data, odometry, and PID feedback loops. **Placed 3rd in State and Qualified for Worlds.**
- **Hosted event** for GT-TAME students to provide students and opportunity to build robots and learn about engineering
- **Organized an intramural combat robot tournament** for Lamar Engineering Students to build robots and compete against each other
- **Organized and Refereed** Lamar’s VEX Robotics Tournament, Spindletop Showdown

IEEE Robotics Chair:

August 2023 – Present

- **Captain of** Lamar’s IEEE Region 5 **Robotics Competition** team that will compete at the Greentech conference. Designed holonomic drivetrain and electronics schematics for autonomous obstacle avoidance task
- **Competed** in the IEEEExtreme 24 hour coding competition with team of 3 and placed 9th in the region

Volunteer Experience

- **Team Mentor** for Barbers Hill Robotics Team, Silsbee Robotics Team, and Texas Academy Robotics Team. Taught and assisted students with programming and helped develop ideas and strategies
- **Judge and Referee** at multiple local VEX Robotics Tournaments

Technical Skills

Programing: C++, JavaScript, Svelte, Arduino IDE, GitHub

Robotics: Circuits, Microcontrollers, CAD, Onshape, motion control algorithms, team management