Seth Friend

726-234-4817 | friend.seth03@gmail.com | sethfriendportfolio | linkedin.com/in/seth-friend

Objective

Motivated ECE student seeking a summer internship to apply technical skills, collaborate on real-world engineering challenges, and grow through customer-facing and cross-functional experiences.

Education

University of Texas at Austin *Austin, TX*

Electrical and Computer Engineering GPA: 3.77 *Expected Graduation, May 2027*

- Relevant Coursework: Materials Engineering, Probability and Random Processes, Intro to Electrical Engineering

Experience

Electromechanical Lead *Austin, TX*

Ivy Technologies / Amazon Robotics *May – July 2025*

- Led multiple teams of 7–10 to construct 12 Cardinals (Amazon's automated work cells), completing ahead of schedule
- Collaborated with other leads to install 409 automation-compatible chutes, including mechanical assembly and electrical wiring
- Performed final quality checks and troubleshooting for 20 Proteus self-driving robots responsible for warehouse cart transport

Technical Assistant → Projects Lead *Austin, TX*

Texas Invention Work | Electronics and Projects Teams *Aug 2024 – Present*

- Provide technical support to students and faculty, assisting in project design and tool use
- Deliver workshops and trainings on soldering, 3D printing, and basic electronics

Research Assistant and Robotics Mentor *Austin, TX*

Robot Interactive Intelligence Lab *Jan – Dec 2024*

- Taught a robot arm to hit a balloon in simulation using robomimic with more than 95% success
- Worked on a team of 3 to integrate Sony Mocopi as an input device for Telemoma
- Dual-booted three Windows computers to Ubuntu 20.04; set up ROS Noetic and all necessary repositories
- Taught concepts such as imitation learning, PyTorch, ROS, pose, and inverse kinematics to 20 high school students
- Oversaw construction of 6 BaRiFlex robotic hands

Projects

Bipedal Robot | *CAD, Soldering, Fabrication, Simulation* *July 2025 – Present*

- Designed a humanoid robot in Onshape with 5 DoF in each limb
- Constructed robot using quasi-direct drive motors in each leg joint and servos in the arm
- Working on simulating the robot in Issac Sim to achieve walking

Extracurricular Experience

Society of Hispanic Professional Engineers | *Active Member* *Aug 2023 – Present*

Engineers for a Sustainable World | *Active Member* *Aug 2023 – Present*

- Provided support to new Ecobots project with arduino, robotic, and soldering workshops

Texas Robo Rumble | *Team Lead* *Jan – Apr 2024 & 2025*

- Spearheaded creation of a 7-member team and delegated work to all members
- Used soldering, milling, 3D printing, and CAD to create two robots in the 3 lb weight class
- Designed and fabricated a 3D-printed end effector to support 2 lb of weight

Technical Skills

Languages: Python, Java, Spanish
CAD and Design: SolidWorks, Fusion 360, KiCad, LTspice
Developer Tools: Git, VS Code, Arduino IDE
Libraries: Pandas, NumPy, Matplotlib, PyTorch