SETH FRIEND

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

SUMMARY

Junior ECE student at UT Austin with hands-on experience in robotics, electromechanical systems, and embedded hardware. Proven leader in Amazon Robotics deployments and competitive robotics teams. Skilled in CAD, electronics, and Python development with strong design and fabrication expertise.

EDUCATION

University of Texas at Austin

Austin, TX

Electrical and Computer Engineering GPA: 3.77

Expected Graduation, May 2027

• Relevant Coursework: Linear Systems/Signals, Probability and Random Processes, Embedded Systems

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
- Conducted quality assurance and troubleshooting on 20 Proteus self-driving robots, ensuring full operational readiness

Technical Assistant \rightarrow Projects Lead

Austin, TX

Texas Invention Work | Electronics and Projects Teams

Aug 2024 – Present

- Provide technical support on electronics design, fabrication, and tool usage to students and faculty
- Deliver workshops and trainings on soldering, 3D printing, and basic electronics
- Developing project based supply system to streamline student prototyping

Research Assistant and Robotics Mentor

Austin, TX

Robot Interactive Intelligence Lab

Jan - Dec 2024

- \bullet Achieved 95% success training a robot arm in simulation using imitation learning (robomimic)
- Worked on a team of 3 to integrate Sony Mocopi as an input device for Telemoma
- Configured Ubuntu/ROS environments for lab computers, supporting ongoing robotics projects
- Mentored 20+ high school students in PyTorch, ROS, and kinematics
- 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
- Developing robust walking in Issac Sim

Extracurricular Experience

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 3lb weight class

Engineers for a Sustainable World | Ecobots Robotics Lead

Aug 2023 - Present

• Support new Ecobots project with arduino, robotic, and soldering workshops

Society of Hispanic Professional Engineers | Active Member

Aug 2023 - Present

TECHNICAL SKILLS

Languages: Python, Java, Assembly

CAD and Design: SolidWorks, Onshape, Fusion 360, KiCad, LTspice

Developer Tools: Git, VS Code, Arduino IDE **Libraries**: Pandas, NumPy, Matplotlib, PyTorch