Daniel Yu

🌐 Portfolio ⬡ GitHub in LinkedIn ✉ zhanxiangyu@tamu.edu 📱 512-968-5454

EDUCATION

Master of Science, Engineering Technology   **Texas A&M University**
Graduation: May 2026

Bachelor of Science, Engineering Technology(Electronic Systems)   **Texas A&M University**
Minors: **Computer Science** & **Cybersecurity**   *Major GPA: 3.56*
Graduation: May 2024

SKILLS

C, C++, MATLAB, Semiconductor Test & Validation, ATE, Embedded Systems & Firmware, Analog & Digital Electronics, Instrumentation, Control Systems, ARM Cortex-M Architecture, RTOS & Concurrent Programming, PLCs, Python, Data Structures and Algorithms, Computer & MCU Architecture, RF & Electromagnetics, Artificial Intelligence, Machine Learning, Java, HTML/CSS, JavaScript, LabView, HDL, VHDL, x86 Assembly, Cisco Networking Architecture, Network Systems/Security

WORK EXPERIENCE

Graduate Researcher   **College Station, TX**
ETID Department at TAMU   *Aug 2024 - Present*
- The research aims to realize 3D radar imaging to monitor and analyze rooftops/buildings' integrity.
- The plan is to take 2D image slices and reconstruct the 3D environment(TOMO-SAR), using Python, C++, and the API libraries of the radar board.

Graduate Teaching Assistant   **College Station, TX**
ETID Department at TAMU   *Aug 2024 – Present*
- Coached students on the construction of Analog ICs with semiconductor devices (diodes, filters, amplifiers, power supplies, transistors).
- Applied circuit analysis techniques to debug circuits using test equipment.

Automation Engineer Intern   **Beijing, China**
Beijing HangZhen Technology Co., Ltd   *May 2023 – July 2023*
- Analyzed PLC programs of automation lines for documentation and continuous integration.
- Applied automation techniques to program Siemens PLCs to coordinate between different machine tools and the production control software.

PROJECTS

2D Topdown Spaceshooter Game*(reference GitHub)*   *June 2024 - Sep 2024*
- Researched relevant C/C++ libraries and related APIs for graphical applications and games.
- Applied OOP and dynamic memory management to implement various classes to realize game features.

HRTBT Group - Embedded Software Engineer   *Aug 2023 – May 2024*
- Developed a remote and contactless vital sign measurement device using mmWave radar sensors and peripherals.
- Programmed the signal processing process to extract vital features using Embedded-C and TI mmWave API library.
- Designed customized Python GUI with configurable parameters to display heart/breathing rates graphically.

Path Finding Robot   *Apr 2022 – May 2022*
- Implemented sequential logic circuits in Intel Quartus Prime to program an FPGA-controlled robot for path-following.

HONORS

Dean's Honor Roll   *Fall 2023, Spring 2024*
Distinguished Student   *Spring 2023*