

Daniel Yu

📁 Portfolio

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🐙 GitHub

☎ 512-968-5454

EDUCATION

M.S. Engineering Technology

Graduation: May 2026

Texas A&M University

B.S. Electronic Systems Engineering Technology

Minoring in Computer Science & Cybersecurity

Graduation: May 2024

Texas A&M University

Major GPA: 3.56

WORK EXPERIENCE

Graduate Researcher

ETID Department at TAMU

College Station, TX

Aug 2024 - Present

- The research aims to realize 3D radar imaging to monitor and analyze rooftops/buildings integrity.
- The plan is to use Tomography SAR (Synthetic Aperture Radar) imaging techniques. Namely, the radar board is treated as a black box, and configured to generate 2D image slices of the 3D environment (Tomography) while moving to different positions (SAR).
- The project will be implemented in Python and C++.

Graduate Teaching Assistant

ETID Department at TAMU

College Station, TX

Aug 2024 – Present

- Lectured and guided students on how to use semiconductor devices, such as diodes, FET, BJT, and op-amps, to implement analog IC applications, such as power supplies, active filters, signal conditioning, and amplifiers.
- Using test equipment for analog IC, such as oscilloscope, multimeter, network analyzer, spectrum analyzer, to diagnose issues in students' circuits.

Automation Engineer Intern

Beijing HangZhen Technology Co., Ltd

BeiJing, China

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.
- Collaborated with colleagues about standardizing the process of project execution and management.

PROJECTS

2D Topdown Spaceshooter Game

June 2024 - Sep 2024

- Researched relevant C/C++ libraries and related APIs for graphical applications and games.
- Applied OOP concepts and dynamic memory management to implement player, enemy, and bullet classes to realize game features.
- For specifics, reference GitHub.

Time Tracking Software

June 2024 – Aug 2024

- Researched various Tkinter APIs to develop GUI for timer tracking and item creation.
- The application allows users to create items and associate them with certain categories in order to track and manage their workflows.
- For specifics, reference GitHub.

HRTBT Group - Embedded Software Engineer

Aug 2023 – May 2024

- The project aims to create a remote vital sign measurement device using mmWave radar sensors and related peripherals.
- Analyzing software documentation of implemented features of hardware platforms to establish the groundwork for later development.
- Evaluating feasibilities of machine learning and multiple-input-multiple-output radar imaging for fast processing time.
- Developing software processes to fulfill project scope using Python and Embedded-C

Path Finding Robot

Apr 2022 – May 2022

- Implemented sequential logic circuits in Intel Quartus Prime to program an FPGA-controlled robot to follow designated paths.

RELEVANT EXPERIENCE

- Coursework: Data Structures and Algorithms, Artificial Intelligence, Computer Architecture, Control System, Embedded System Software, Analog Electronics
- Programming Languages: Python, C, C++, (have experience in) Java, HTML/CSS, Javascript
- Organizations IEEE, Aggie Coding Club, 12th Can

HONORS

Dean's Honor Roll

Fall 2023, Spring 2024

Distinguished Student

Spring 2023