Daniel Yu

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EDUCATION

Texas A&M University (TAMU), College Station, TexasMajor GPA: 3.465Major: Electronic Systems Engineering TechnologyMay 2024Minor: Computer Science & CybersecurityMay 2024

RELEVANT COURSEWORK

Microcontroller Architecture ♦ Computer Organization ♦ Embedded Systems Software

Data Structures and Algorithm ♦ Analog Electronics ♦ Power Systems and Circuit Applications

Electromagnetic & High Frequency Systems

SKILLS

C++ ♦ Python ♦ Embedded C ♦ Arm Cortex Assembly ♦ Multisim ♦ Intel Quartus Prime PLC Programming ♦ Lean Six Sigma Yellow Belt

WORK EXPERIENCE

Beijing HangZhen Technology Co., Ltd

May 2023 - July 2023

Industrial Automation Engineer Intern

- Studied PLC programming and industrial automation techniques from scratch.
- ♦. Programmed Siemens PLC S-1200 for coordination between PCS and equipment.
- Designed software architecture for exchange between PCS and PLC-controlled operations.
- ♦. Analyzed PLC programs of automation lines for documentation.
- •. Collaborated with colleagues about standardizing the process of project execution.

RELEVANT EXPERIENCE

Department of Engineering Technology and Industrial Distribution

Aug 2023 - Present

Undergraduate Researcher

The research aims to develop an ISAR imaging and detection system for various objects using MIMO mmWave sensors with AI to enhance efficiency.

- Analyzing research literature about ISAR and Deep Learning for project implementation.
- ◆. Evaluating potentials of different neural network architectures for better image accuracy and process efficiency.
- Devising data preprocessing methods for radar sensor-specific signal output.

HRTBT GroupEmbedded System Software Engineer

Aug 2023 - Present

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 the feasibilities of machine learning and multiple-input-multiple-output radar imaging for fasting processing time.
- Developing software processes to fulfill project scope using Python and embedded C

Department of Technology and Industrial Distribution Oct 2022 - Dec 2022

Text Adventure Game: programmed a text-based game using Assembly on MSP432 microcontroller and LCD

Department of Technology and Industrial Distribution

Apr 2022 - May 2022

Path Finding Robot: constructed sequential logic circuits for an infrared-sensor robot to follow designated routes

Department of Technology and Industrial Distribution

Mar 2022 - May 2022

Microcontroller UI: devised interface of functionalities between MSP432 and PC using embedded C

HONORS

Dean's Honor RollFall 2023Distinguished StudentSpring 2023