Duy Nguyen

EMBEDDED ENGINEER

Profile

I am a recent college graduate with a Bachelor of Science in Computer Engineering and currently seeking an entry-level position as an Embedded Software Engineer. I am also looking forward to enroll in a Master's program in Artificial Intelligence to further my knowledge and skills in this field. With this knowledge, I hope to contribute to the development of smarter AI IOT devices.

Education

Bachelor's of Science, California State University of Fullerton, Fullerton, CA

AUGUST 2018 — MAY 2023

Major in Computer Engineering

Certificates

Google Cloud Introduction to Generative AI

AUGUST 2023

JPMorgan Software Engineering Virtual Experience Program on Forage

AUGUST 2023

- Used Perspective data visualization software and Python to monitor stock price trends and create trading strategies.

JPMorgan Agile Virtual Experience Program on Forage

AUGUST 2023

W3Schools Certified C++ Developer

JULY 2023

- Fundamental knowledge of programming using C++

Projects

Two-Factor Authentication, Garden Grove

JULY 2023

- Developed a secure two-factor authentication system, integrating facial recognition and fingerprint scanning for a personal project.
- Employed Google Coral Development Board for efficient machine learning-based face recognition implementation. (Python, OpenCV, Serial, EdgeTPU)
- Utilized Arduino UNO R4 and its platform for accurate fingerprint verification, contributing to robust user authentication. (C++, Command communication, I2C/SPI)
- Expertly established communication between two micro-controllers, facilitating seamless interaction and data exchange between authentication modules.

Automatic Wastes Sorter, CSU Fullerton

AUGUST 2022 — MAY 2023

- Automates waste sorting using Google Coral Dev Board with built-in Machine Learning Algorithms
- A system that had a central sorting chamber that could move along a sliding floor for sorting into three bins, trash, recycle, and compost.
- Completed the user interface function, using the Arduino and ultrasonic sensor to detect the user in front of the machine to power up the program.

Details

Garden Grove, CA
United States
7145993858
duyha.nguyen30@gmail.com

Web Portfolio

https://www.duyhanguyen.info/

Skills

Agile/Scrum

Python/C++

Embedded C/Arm-Cortex

Swift

Verilog/VHDL

RTOS/FreeRTOS

Machine Learning/TM

NI Multisim

ModelSim/Xilinx Vivado

Languages

English

Vietnamese

- Completed the trash volume tracking in each bin and display the fill percentage on a 20x4 Liquid Crystal LCD.

MyTranslatorAPP (SwiftUI), Garden Grove

JULY 2023 — PRESENT

- Implemented translation functionality using the Google Cloud Translation API.
- Utilized SwiftUI for building a responsive and intitutive user interface.
- Managed asynchronous network requests and data parsing
- Enabled language selection for input and output languages
- Created an adaptive UI that adjusts to different device sizes and orientations.
- Self-explore project

MyPortfolio (React.js), Garden Grove

MARCH 2023 — PRESENT

- Designed a web portfolio for other people and recruiters to get to know me.
- Using HTML, CSS, and React.js as programming languages.
- Host the web using Vercel.
- Self-explore project

Basketball Score Board FPGA, CSU Fullerton

AUGUST 2022 — DECEMBER 2022

- Implement the basketball scoreboard using the FPGA board, Nexy's A7 (Verilog HDL)
- Converted BCD to a 7-segment display controller using Common Anode.
- Activated correct LED bits, corrects 10s and 1s place for the bits to display the number correctly using a combo of % and /.

Traffic Light Implementation, CSU Fullerton

JULY 2022 — DECEMBER 2022

- Designed a sample traffic light tracking system using the MSP432 board (Embedded C) and electronic parts.
- Applied the Finite-State Machine method for traffic lights and pedestrian lights transition

Employment History

Project Manager, Phuc Long Coffee & Tea, Garden Grove, CA

AUGUST 2021 — PRESENT

- Director of Phuc Long Weekly Acoustic Show/ Season Contest.
  - Plan the format, theme, and content of each liveshow.
  - Contact with performers, and arrange practice meetings.
- Planning on format and theme of Phuc Long Acoustic Contest Season 2

Shift Manager , Phuc Long Coffee & Tea, Garden Grove

JULY 2021 — PRESENT

- Supervised employees and oversaw quality compliance with company standards for food and services.
- Trained and mentored new employees to maximize team performance.

Shift Manager, R&B Tea USA, Garden Grove, CA

AUGUST 2018 — JUNE 2021

- Trained new employees and delegated daily tasks and responsibilities.
- Prepared shift summary reports for the supervisor and communicated regularly on goals and progress.
- Regulated pricing, inventory count, and supply during shift hours.