Dwight Diesmo

Fresh computer engineering graduate student in search of a educational and team-oriented environment where I can apply, develop, and learn skills in the fields of embedded systems, digital design, distributed systems, computer networks & database. I am eager to serve a broad range of duties to better grasp an understanding of the business, product development, and engineering process.

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EDUCATION

San Diego State University

Bachelor's in Computer Engineering | 2018 - 2022

- SDSU Weber Honor's Society
- SDSU Dean's List 2019, 2020, 2021
- SDSU IEEE Vice Chair of Projects, Community Initiative Director
- SDSU Residence Hall Association Vice President of Administration
- SDSU Entrepreneur Society Member

 Embedded Systems Programming, Embedded Operating Systems, Microprocessors, VLSI System & Circuit Design, Computer & Data Networks, Multimedia Communications

PROFESSIONAL EXPERIENCE

Computer Engineer | Team Lead | Champion

SD Hacks | April 2022

- Awarded "Best Overall" for designing an Autonomous Adaptive Solar Ecosystem
- Organized team of Electrical and Computer Engineers to compete in hackathon.
- · Designed system level diagram and currated parts
- Created Web App, soldered, tested, led development on solar panel, photoresistors, voltage switch, solar charger, and liquid pump

Embedded Systems Engineer

Department of Defense | Senior Design | August 2021 - May 2022

- Partnered with National Security Innovation Network, our team was tasked with developping a launchable remote surveillance device
- Coded embedded system software for triggering via motion sensor, recording raw audio signals from an analog microphone, image data from camera, NMEA GPGGA data from GPS, and seismic data from inertial mass unit.
- Implemented fog computing layer for intercepting raw data from the physical device then processing respective data to be viewed in the UI.
- · Designed the architecture and developped mobile/web-application remote command interface on the Flask Python Framework and SQL

Assisstant

SDSU Research Foundation January 2022 - May 2022

- Trained in cybersecurity, sensor processing, communications technology, and artificial intelligence.
- Used linux, C, and operating system knowledge to inject background processes into the Debian operating system.
- Destroyed debian operating system in virtual machine environment.
- This was a funded training program from the US Marince Corps.

Founder | Lead Event Organizer

Hack Iloilo w/ NewCo Foundation | January 2019 - August 2019

- Responsible for garnering sponsorships from US/ Philippines based companies
- Reached out to Universities, High Schools, and Organizations to organize student involvement
- Managed a team of volunteers which I recruited
- Managed/ mentored 125 competitors, co-judged final projects, and ran coding workshops

Makerspace Specialist, Mentor & Lead Intern

RCMakes & NewCo Foundation | June 2016 - August 2020

- Designed and Coded the official company website using Hugo as a framework
- Managed the Back-End Website and Corporate Wiki
- Simultaneously led multiple teams of interns in the development of consumer products and services
- Trained interns in the use of industrial equipment (3D Printers, Laser Cutters, etc.)
- · Responsible for communications and involvement with outside organizations, customers, and businesses

Non-Credentialed CTE Instructional Assistant

Ventura County Office of Education | June 2019 - August 2019

Taught high school students modern web/app development using Bootstrap, Git, Github, HTML, CSS, JavaScript, and React*

TECHNICAL SKILLS

C, C++, C#, Python, HTML, CSS, JS*

Verilog, System Verilog, Vivado

Bootstrap Framework

Python Flask

AutoDesk Fusion 360 * K

KiCad, TinkerCad, Fritzing

SQL*, MySQL

Matlab

Git, GitHub