# DIEGO AULET-LEON

Engineering leader bridging software, hardware, and automation to solve complex challenges.

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#### Education

# California State University, Long Beach

Long Beach, CA

Master of Science in Computer Engineering

Graduated Dec. 2020

- Selected Coursework: Topic Distributed Computing, Machine Learning, Artificial Intelligence, Hardware Software Codesign, Advanced Software Engineering, Advanced Computer Architecture, Mobile Application Development (Android)
- Awards: Entered Tau Beta Pi Theta Chapter and IEEE-HKN (Eta Kappa Nu) Chapter

# University of California, Santa Cruz

Santa Cruz, CA

Bachelor of Science in Computer Engineering, Minor in Electrical Engineering

Graduated June 2012

- Selected Coursework: Analog Electronics, Mechatronics, Embedded Systems, RF Hardware Design, Feedback Control Systems, Logic Design, Sensors and Sensing Technology, Digital Design with Verilog, Power Conservation and Control
- Awards: Elected as Chair of the UCSC IEEE Student Branch

# Experience

Moog Inc. Torrance, CA

Software Engineer, Test Equipment & Control Accounts Manager

Aug. 2021 - Present

- Develop software for automated test stands to test flight-critical actuation systems using Python, NI LabView, DSpace ControlDesk, and Linux driver development in C.
- Lead project planning, execution, and risk management while overseeing small teams on software development tasks such as low-level design, coding, and testing.
- Manage project costs through earned value reporting, track scope changes, and ensure timely software delivery by coordinating critical dependencies in the project's Master Schedule.

#### Tritium Technologies

Torrance, CA

Support Engineering Manager

July 2020 - July 2021

- Built and led a customer support team providing engineering support for EV chargers across the Americas.
- Analyzed data to drive product improvements, implemented change management initiatives, and optimized business
- Ensured service and commissioning timelines met customer and contractual requirements, coordinating field and remote support operations.

Lead Support Engineer

Nov. 2017 - July 2020

- Provided engineering support for EV DC Fast Chargers, leveraging expertise in power electronics, networking, Debian Linux, Python, MQTT, C++, and CAN Bus.
- Diagnosed and resolved charger issues by collaborating with support teams, test engineers, electricians, and software developers.
- Developed troubleshooting tools and provided technical training to enhance service efficiency.

#### Bonneville Power Administration

Vancouver, WA

Electrical Engineer

Jan. 2015 - Nov. 2017

- Provided on-site project management and testing for high-voltage transmission facilities across the Northwest.
- Designed and implemented electrical schematic revisions to optimize transmission system operations.
- Developed Python and C software tools to streamline field testing and improve efficiency.

## Clover Technologies Group

Van Nuys, CA

Hardware Engineer

Feb. 2013 - Dec. 2014

- Designed and developed digital circuits and serial memory device protocols for aftermarket laser toner and inkjet cartridges.
- Conducted system-level reverse engineering and implemented schematic capture for circuit design.
- Assisted in firmware development and hardware validation to enhance product performance on ARM and 32-bit microcontrollers in Embedded C.

# **Projects**

Actuation Controller Test Executive | Python, National Instruments DAQ, HIL Testing Aug. 2021 - Present

- Developed a test application using wxPython in Python to enable multiple instruments to interact with an actuator control unit (ACU).
- Implemented automation for various test types using oscilloscopes, multimeters, and National Instruments DAQ tools.
- Designed the software to support serial communication with the ACU and be configurable for multiple users.

OffsetLX Calibration Tool | Python, Qt, SEL-2411, Serial Communication, TCP/IP, Git May 2016 - Nov. 2017

- Designed a Python application using the Qt library to calibrate SEL-2411 devices for accurate zero values.
- Implemented serial and TCP/IP communication to interact with the SEL-2411 and process input data.
- Provided a user-friendly interface for testing engineers to perform calibration efficiently.

# IS5000 EEPROM Chip Emulator | SPI, 32-bit Microcontroller, Embedded C, PCB Design Feb. 2013 – Dec. 2014

- Designed a custom circuit using Eagle and a Texas Instruments MSP430 microcontroller to emulate an SPI memory device.
- Programmed the MSP430 in C to replicate EEPROM functionality for the IS5000 postal printer.
- Developed and tested the emulator to ensure seamless integration with existing hardware.

# Specialized Skills

Programming Languages: Python, C, Java, C#, C++, MySQL, Swift, JavaScript, HTML/CSS

Frameworks: React, Flask, WordPress, FastAPI, Qt

Developer Tools: Git, Docker, VS Code, Visual Studio, PyCharm, IntelliJ, Eclipse, LabView, Git, Android Studio,

XCode, Xilinx ISE

Libraries: pandas, NumPy, Matplotlib, Scikit, Pytorch, TensorFlow, OpenCV, wxPython

Management Tools: Microsoft Project, Microsoft Visio, Google Analytics, Tableau, JIRA/Confluence, Balsamiq

Wireframes, Miro, Agile/Scrum, InVision, Microsoft Power Bi

Communication Protocols: TCP/IP, PLC, Wi-Fi, Bluetooth, USART, 1-wire, USB, SPI, CAN, I<sup>2</sup>C, OCPP Hardware: AMD (Xilinx) Zybo FPGA, ARM/16-bit/8-bit CPU Architectures, Atmel, Texas Instruments, PIC (Microchip), Freescale

### Certifications & Affiliated Professional Organizations

Engineer-in-Training (EIT) California BPELSG

Product Management Bootsamp Cortificate UCL

Product Management Bootcamp Certificate UCLA Extension