Amir Alexander Abed
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EDUCATION
UNIVERSITY OF CALIFORNIA SAN DIEGO 9500 Gilman Dr., La Jolla, CA 92093
Bachelor's degree in Electrical Engineering, Machine Learning Depth, June 2022, GPA: 3.28

WORK EXPERIENCE
Agnetix / Sensor Development Intern and Full-Time Electrical Design Engineer
June 2021 - December 2022, 7965 Dunbrook Rd STE I, San Diego, CA 92126
● PCB design for sensor boards in Altium and enclosure design in Solidworks and Onshape
● Sensor development with soil, temperature, humidity, light, airflow, and lidar sensors
● Python code using matplotlib and pandas for data analysis of sensors to determine accuracy
to utilize the most efficient and cost-effective tools in order to maximize profits
● Hands-on work with raspberry pis and microcontrollers such as PIC32s from Microchip
RF Precision Cables / Technical Assistant
June 2016 - August 2020 (During Summer), 1600 S Anaheim Blvd F, Anaheim, CA 92805
● Hands-on work with the assembly of radio frequency cables, specifically coaxial cables
● Testing cables for function and shipping them to companies worldwide

SKILLS
● Languages: C, C++, Python, MATLAB, Java, Javascript, HTML, CSS, Processing, Verilog
● Utilities: Microsoft Office, SDR software, ESP32s, RFID scanners, sensors
● Technologies: Linux, Docker, MySQL, Arduino, Raspberry Pi, Soldering, Breadboarding
● Design: Altium, Solidworks, MPLAB IDE, Vivado, Quartus Prime, Embedded Systems

ACTIVITIES, AWARDS, and GROUPS
● IEEE member and group project participant, 2 years in QP (Quarterly Projects)
● IEEE QP++ Winter quarter 2020 competition winner (ENLIGHTEN)
● IEEE QP Fall quarter 2019 competition runner-up (!ForgettaBoutIt)
● COSMOS Cluster Summer Program Assistant helping students transition into college

PROJECTS
ENLIGHTEN
  ● Automated home light switches that turn on when person is detected in room using tensorflow, ESP32, Raspberry Pi, Firebase, Bluetooth Low Energy
!ForgettaBoutIt
  ● RFID scanner device using Arduino-based module inside backpack notifies via app
ECE 111 (DIGITAL DESIGN)
  ● Bitcoin mining algorithm using SHA-256 hash code in System Verilog
ECE 107 (ELECTROMAGNETISM)
  ● Matlab program finding discretized charges and capacitance of a parallel plate capacitor