## **RASHID ABDER RAHIM**

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#### **SUMMARY**

Bilingual (English/Spanish) Computer Engineering sophomore seeking an engineering internship where I can use my skills in programming and prototyping to become a positive contributor to your organization's growth and success.

#### **EDUCATION**

#### UNIVERSITY OF CALIFORNIA, SAN DIEGO

#### **Bachelor of Science in Computer Engineering**

September 2022 – June 2026

Clubs and organizations: Rocket Propulsion Laboratory (Avionics, 2023-Present), Yonder Dynamics (Electrical, 2022–2023).

- GPA: 3.98/4.00
- Provost Honors for all quarters enrolled.
- <u>Relevant coursework</u>: Introduction to Analog Design, Basic Data Structures and Object-Oriented Design, Mathematics for Algorithms and System Analysis, Multivariable Calculus and Linear Algebra

## WORK EXPERIENCE

# NISHIMURA DESIGN, Tokyo, Japan

July/2023-August/2023

## **Product Design Intern**

- Conducted thorough user experience (UX) research to identify user needs for an RFID checklist prototype.
- Collaborated effectively within a cross-functional team to bring creative ideas to the prototyping stage.
- Utilized low fidelity sketches and wireframes to visualize the prototype's final design prior to the prototyping stage.
- Assembled a proof-of-concept electronic prototype using standard electrical components and programming in Arduino.
- Designed the prototype's enclosure with SOLIDWORKS and Adobe Illustrator. Used laser cutting and 3D printing for manufacturing the enclosure.

#### **PROJECTS**

## RFID Checklist (associated with NISHIMURA DESIGN)

o Arduino prototype that incorporates a MFRC522 RFID reader and an ILI9341 touchscreen to allow users to scan NFC tags attached to their objects. Implemented a state machine design to manage the different states and transitions of the device (main states include scanning tags, deleting tags and checklist state). Designed the electronics enclosure with SOLIDWORKS and Adobe Illustrator and used 3D printing and laser cutting for manufacturing.

#### • Smart Water Lid (associated with UCSD's ECE 196)

o Collaborated with two other students in designing and manufacturing a prototype for a bottle lid that can track water consumption. Key components included the Seeed Studio XIAO nRF52840 and a VL53L4CD Time-of-Flight sensor. Debugged the source code and troubleshot the electronic components of the lid during the prototyping stage.

## • FM Radio and stereo amplifier (personal project)

o Crude FM radio receiver which incorporates an LC resonator (variable capacitor to adjust resonant frequency), an antenna, a stereo amplifier with two LM386 ICs and a pair of woofers. Designed the schematics and PCB of the amplifier with Altium Designer.

## **SKILLS & ACTIVITIES**

- <u>Programming languages</u>: Java, Python (familiar with Pandas and Matplotlib), C, MATLAB.
- <u>CAD</u>: SOLIDWORKS, Altium Designer, KiCad.
- Circuit analysis and electronics prototyping with Arduino.
- Comfortable with electrical testing equipment (multimeters, oscilloscopes, function generators, DC power supplies).
- Knowledge of HTML and CSS for basic web development.
- Familiar with Premiere Pro for video editing.
- Native fluency in Spanish.
- Hobbies: BBQ Cooking, Boxing.