Rashid Abder Rahim Urbina

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Work Experience

Grupo Intercorp – Lima, Peru   June 2024 – September 2024
Software Engineer Intern – Project: Skill Routes with AI

- Built an end-to-end automation system using Python and Selenium WebDriver to orchestrate course generation across multiple AI platforms (Stack AI/GPT-4, 360Learning LMS, VEED), reducing course creation time from 600 to 10 minutes (98% time reduction).
- Developed a web scraping and content processing pipeline using BeautifulSoup4 to extract, structure, and transform AI-generated educational content into standardized JSON formats.
- Integrated error-handling and retry mechanisms to ensure reliability across browser automation workflows, managing DOM interactions and dynamic content loading.
- Created a React-based web application to automatically render AI generated course materials including video summaries, structured content, and assessment modules.

Nishimura Design – Tokyo, Japan   July 2023 – August 2023
Product Design Intern – Project: RFID Checklist

- Developed a fully functional RFID-enabled checklist system prototype, integrating hardware (Arduino, MFRC522 RFID reader, ILI9341 touchscreen) and software components to create an interactive user experience.
- Designed the system architecture and programmed the firmware in C++, implementing features such as RFID tag reading, touch input processing, custom GUI, and EEPROM data persistence.
- Created a user-friendly interface with a virtual keyboard and animated screens using the Adafruit GFX and ILI9341 libraries.
- Designed the enclosure using Adobe Illustrator and SOLIDWORKS, then manufactured it through a process that combined laser cutting and 3D printing.
- Led weekly training sessions for 4 coworkers on electronic prototyping and software debugging.

Activities & Extracurriculars

Member of the Electrical Subteam, Yonder Dynamics, UCSD   October 2022 – March 2023

- Designed and ordered a PCB design for a rotary sample changer for a Mars Rover.
- Soldered through-hole components on PCBs, as well as SMD components using a reflow oven.
- Analyzed and debugged circuits using oscilloscopes, multimeters, function generators and DC power supplies.

Projects

Smart Water Lid   April 2023 – June 2023

- Collaborated with two students in developing a water lid that tracks a user's daily consumption of water, using the Seeed Studio XIAO with the nRF52840 controller and a time-of-flight sensor.
- Debugged the source code in C++ and troubleshot the electronic components of the lid during development.

FM Radio and Stereo Amplifier   January 2023 – February 2023

- Built a crude FM receiver, incorporating an LC resonator, an antenna, audio amplifier ICs and a pair of woofers.
- Designed the schematics and PCB layout of the stereo amplifier in Altium Designer.

Education

UC San Diego – San Diego, CA   September 2022 - June 2026
Bachelor of Science in Computer Engineering, Minor in Economics   GPA: 3.9
Coursework: Digital IC Design, Intro to Microelectronics, Signals and Systems, Computer Architecture, Object Oriented Programming & Data Structures, Discrete Math & Algorithms, Computer Organization & Systems Programming.

Skills

- **Languages:** English (fluent), Spanish (fluent), Japanese (basic).
- **Programming Languages and Tools:** SystemVerilog, C, C++, Python, Java, MATLAB/Simulink, HTML/CSS, JavaScript, UNIX, Git, Bash, Microsoft Office.
- **Mechanical & Electrical CAD:** SOLIDWORKS, Altium Designer, KiCad.
- **Simulation programs:** Cadence Virtuoso, LTSPICE/PSPICE, PSIM.