Rick Unite

Electrical Computer Engineering student eager to contribute and grow through internship roles

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EDUCATION

California State Polytechnic University, Pomona **Aug '22 - (Expected) Jun '26**

- **Major:** B.S Electrical Computer Engineering

- **Programming Coursework:** Object Oriented Programming, Digital Logic Design Verilog, Data Structures and Algorithms
- **ECE Coursework:** Electrical Circuit Analysis, Microelectronic Circuits, Control Systems Engineering, Signals and Systems, Illumination.

RELEVANT COURSEWORK

ECE 2300 Digital Logic Design & Lab | ECE 3300 Digital Circuit Design & Lab

- Designed and implemented a Doodle Jump-style game on a Nexus A7 100T FPGA using Verilog in Vivado.
- Developed a digital audio module to generate game sound effects, driven by a programmable clock divider.

ECE 2300 Digital Logic Design & Lab | ECE 3300 Digital Circuit Design & Lab

- Designed and implemented a Doodle Jump-style game on a Nexus A7 100T FPGA using Verilog in Vivado.

ECE 3709 Control Systems Engineering & Lab

- Modeled and simulated linear control systems in MATLAB/Simulink, including first- and second-order plant dynamics.
- Applied Laplace-transform methods to derive transfer functions and evaluate steady-state error for standard input signals

PERSONAL PROJECTS & EXTRACURRICULARS

Magic Mirror (Smart Mirror) **Dec' 21**

- Engineered the mirror enclosure using custom cut wooden planks and two-way glass bought from Home Depot and Amazon
- Repurposed an LCD monitor by disassembling it to its core components, enabling seamless display output from the Raspberry Pi
- Deployed a Raspberry Pi as the core processor, configured the system with Raspbian OS, GitHub modules, Linux terminal commands and VNC Viewer, customizing modules to display real time news, weather and time

WDI Imagination Disney Imagineering Competition **Nov' 24**

- Led a 3-person team as Project Manager and 3D Modeler for the WDI Disney Imagineering Competition, focused on reimagining public transportation in major cities.
- Coordinated weekly team meetings and enforced project milestone to ensure timely progress and deliverables
- Designed and rendered a detailed 3D train model using Blender to visually present our proposed transit solution and user experience

Café Sumire Ticketing System **Jun'25**

- Developed a full-stack ticketing system using Node.js and Docker, enabling real-time order management between cashier and barista interfaces; configured local network communication via static IP addresses for multi-device synchronization
- Designed and implemented a responsive frontend in HTML, CSS, and JavaScript, creating an intuitive interface for placing, updating, and tracking orders in a café themed web application

ADDITIONAL EXPERIENCE

IT Intern **CHINT POWER SYSTEMS** **Jun '25 – Aug '25**

- Documented IT procedures and created internal guides to streamline onboarding and technical support
- Gained hands-on experience with cloud tools, device imaging, and Windows administration using VNC Viewer and Sysaid
- Supported IT operations including hardware deployment, software updates, user account management, and printer setup

Computer Systems Administrator **MARATHON PETROLEUM COMPANY** **Oct '23 – May '25**

- Collaborated with a 6-person team to roll out a new refinery-wide intranet that reduced page-load times by 40% for 150+ operators.
- Imported/exported SharePoint data into Excel to build Power BI dashboards-streamlined weekly safety-report generation
- Inspected and updated hundreds of operational forms, catching critical errors and ensuring compliance with safety rules

TECHNICAL SKILLS

- **Software:** C, C++, C# Raspbian, Python, Linux, MATLAB, Java, HTML/CSS, MPLAB, Blender, Fusion 360, Microsoft Tools, Unity, AutoCAD, Solidworks, Node.js, MongoDB
- **Hardware:** Electrical Circuit Design, Constructing Circuits, Raspberry Pi, FPGA Nexus A7 100T, Microcontroller PIC18F4620, Soldering