Anjena Raja

Burbank, CA | (+1) 747-307-1115 | anjena.raja@gmail.com | linkedin.com/in/anjena-raja | anjenaraja.github.io

EDUCATION

University of California, Irvine

Expected Graduation: June 2029

Bachelor of Science in Computer Science and Engineering with Honors

GPA: 4.0/4.0

(Python Programming and Libraries, Classical Physics, and Digital Systems)

Burbank High SchoolAugust 2021 - May 2025High School DiplomaGPA: 4.47/4.0, Rank: 7 of 611

(Honors Computer Science AB, AP Physics C, Differential Equations, and Multivariable Calculus)

SANS Technology Institute

June 2023 - June 2024

Security Essentials: Network, Endpoint, Cloud; Security Foundations: Computers, Technology, Security

TECHNICAL SKILLS

Programming Languages: C++, Java, Python, Verilog, C

Certifications: GIAC Security Essentials 🔗 , GIAC Foundational Cybersecurity Technologies 🔗

License: FCC Technical Class HAM Radio Operator (KO6FIE) 🔗

WORK EXPERIENCE

RTX (Raytheon Technologies), Intern

June 2023 - July 2023

- Designed a laser-based communication system to make long distance and space communications up to 100 times faster compared to RF systems
- Integrated a two-way communication system with an ACK protocol, repeaters, error correction, encryption, and secure coding practices into my suggestions <u>Writeup</u>, <u>Slideshow</u>
- Prototyped my designs to transmit information using Pi Pico and IR LEDs
- Presented my research to 5 industry professionals in data transmission and computer science
- Collaborated with facilitators, mentors, and peers

City of Burbank Community Development, Intern

June 2024 - August 2024

- Verified time sheets, receipts, and employee reimbursements
- Catalogued and sorted 500+ files using Microsoft Excel and Word
- Designed flyers for the department for their events using Canva
- Helped at the front desk to answer questions from community members on receiving aid
- Created folders containing housing assistance resources and streamlined folder formation process

PROJECTS & EXPERIMENTS

- Implemented the Simple as Possible Computer architecture to create a CPU which performs arithmetic. Used Malvino's SAP-1 outlines and programmed the Nexys A7 AT-100 FPGA using Verilog language.
- Used an ESP8266 microcontroller board along with LED matrices to create a scrolling display. Text can be entered in an app built using MIT App Inventor. <a>丞
- Created a working model of a home automation system controlled through a phone app. Uses ESP8266 programmed in C++ to connect to Wi-Fi access point and temperature sensors. №
- Programmed an Arduino to accurately measure and display human response times to light, sound and touch stimuli. This was used to determine which sense humans respond to most quickly.
- Determined which colors of light provide optimal growing conditions for plants. Created a circuit to control the LED lights and tabulated plant height over time based on observations.
- Identified whether drip irrigation is more effective than periodic watering. Implemented a simple drip irrigation set-up along with a microcontroller-based system that releases water at specific intervals and tracked soil moisture over three weeks.

LEADERSHIP & AWARDS

Leadership: President & Founder - Digital Electronics Club

Chairwoman - Coding Club

Member - GIAC Advisory Board 🔗

Awards: Dave and Mary Crouch UCI ICS Merit Scholarship recipient, Two-time National Cyber Scholarship winner, Math Kangaroo Competition 2nd rank nationwide and scholarship winner, National Merit Commended Scholar, California Scholarship Federation Gold Seal Bearer, State-level Gold-rank orchestra violinist