

Victor Rivera

(209) 931-5633 vmrivera722@gmail.com [Github](#)

Education

University of California Santa Cruz:

- Bachelor of Science in Computer Engineering June 2023
- Bachelor of Science in Bioengineering: Bioelectronics June 2023

Certificates:

- Cisco Certified Network Associate (CCNA) 201-300 September 2023

Skills

Programming Languages: Python, C++, C, JavaScript, TypeScript

Frontend Development: React, HTML, CSS, JavaScript/TypeScript

Backend Development: Express/Node.js (basics), MongoDB

Automation: Shell Scripting, Python Scripting, Jenkins (basics)

Virtualization: Virtual Machine, Python Virtual Environment, Docker (basics)

Version Control: Git

Core Networking Protocols: IPv6, IPv4, OSPF, BGP, STP, LACP, DHCP, DNS, NTP, HSRP, GLBP

Documentation: LaTeX, PowerPoint, Excel, Word, Google Docs, Google Sheets, Google Slides

Graphing: Python (Matplotlib, Seaborn), gnuplot, R (basics), Matlab (basics)

Projects

[Lempel-Ziv File Compressor and Decompressor](#)

- Developed a C program capable of compressing and decompressing binary, text, and code files.
- Verified functionality and robustness through extensive testing using shell scripts.
- Implemented a trie and a custom-built data structure to optimize the program for efficient performance.
- This project deepened my understanding of C, data structures, programming, and automated testing.

[HTTP to HTTPS Web Proxy](#)

- Designed and implemented a multithreaded web proxy written using C++.
- Converted HTTP requests from clients to HTTPS requests sent to the server, and vice versa for responses.
- Implemented access control lists (ACLs) for connection restrictions that were handled by the proxy.
- Conducted thorough testing with Shell Scripts to ensure functionality, quality, and robustness.
- This project enhanced my expertise in TCP/IP, networks, C++ programming, and Shell scripting skills.

[Personal Web Portfolio](#)

- Developed a personal web portfolio using React, Typescript, CSS, and HTML.
- Implemented routes using react-router-dom (version "6.21.0") for a comprehensive user experience.
- Ensured responsiveness across various screen sizes through effective styling.
- This project deepened my understanding of frontend development, React, Typescript, and CSS.

Other Work Experience

General Agricultural Worker, Sambado & Son - Linden, CA

Summers 2018 – 2022

- Oversaw a crew of 12 while operating and maintaining tractors during apple season, demonstrating leadership, ability to multitask, and teamwork.
- Worked several agricultural jobs in adverse weather conditions and adapted to changing work environments, illustrating adaptability and a strong work ethic.