Victor Rivera

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Education

University of California Santa Cruz

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

Certificates

- Cisco Certified Network Associate (CCNA) 201-300
- Currently Pursuing DevNet Associate Certification

Skills

Languages: Python, C++, C, Javascript, Typescript
Core Networking Protocols: IPv6, IPv4, OSPF, BGP, STP, LACP, DHCP, DNS, NTP, HSRP, GLBP
Network Administration: VLANs, WLANs, Subnetting, IP addressing, Route Summarization, QoS, NAT
Network Security: ACLs, DHCP Snooping, ARP inspection, Port Security, TACACS+, RADIUS, WPA2, WPA3
Troubleshooting Network Issues: cURL, ping, traceroute
Network Monitoring: Wireshark
Version Control: Git
Documentation: LATeX, PowerPoint, Excel, Word, Google Docs, Google Sheets, Google Slides

Projects

IPv6 Address Resolution Simulator

- Developed a terminal-based Python program simulating IPv6 address resolution on user built topologies.
- Implemented using BFS search, simulating Neighbor Solicitation broadcast Neighbor Advertisement.
- Enhanced understanding of IPv6 and improved Python programming skills.

HTTP to HTTPS Web Proxy

- Designed and programmed a multithreaded web proxy written in C++.
- Accepts HTTP requests from clients and converts them to HTTPS requests sent to the web server, and vice versa for the response.
- Connections restricted using ACLs and managed by the proxy.
- Tested functionality to ensure quality and robustness using python scripts
- Improved TCP/IP and Network Fundamentals, C++ programming skills, and Python scripting skills.

Senior Capstone Project - Smart Bike Lock

- Designed and built a GPS-enabled smart bike lock, interfacing with a smartphone app via WiFi and Bluetooth in a group of 7 people.
- Enhanced troubleshooting skills, leadership, teamwork, and communication/presentation skills.

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.