Ricardo Miranda

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EDUCATION

CALIFORNIA STATE UNIVERSITY – LOS ANGELES   Los Angeles, CA
B.S., Computer Science   May 2023
GPA: 3.1/4.0
Relevant Coursework: Fundamental Network Systems and Cybersecurity, Topics in Advanced Computer Science: Cybersecurity, Computer Network Configuration and Management, Intro to Autonomous Robotic Systems

SCHURR HIGH SCHOOL   Montebello, CA
Graduate with Highest Honors, GPA: 3.6/4.0   June 2018

PROJECTS

LOS ANGELES BUREAU OF ENGINEERING ROBOTICS (Senior Capstone Project, 2022-23)
- Co-led a ten-person team to develop a controllable rover to assess over 11,000 miles of sidewalks to determine ADA compliance, cutting survey time by 90% by eliminating the need to send full survey teams to the field
- Stakeholders included the LA City Engineer, Deputy City Engineer, Systems Director, and Senior Systems Analyst
- Developed level 0 and 1 data flow diagrams and contributed to software requirement specifications and design documents
- Designed and equipped new rover with GPS, digital level and LiDAR sensors, using a Raspberry Pi running Robot Operating System to communicate between hardware and software
- Led a team of 3 to improve custom rover controller web application utilizing HTML, CSS, and Javascript the previous team had developed and port it to the new platform
- Developed an intuitive UI with features to view live data, filter data and developed a D-pad to control the rover with more stability
- Learned project decomposition for a large year long project, determine which teammates were better suited for different tasks, and to communicate project developments and setbacks with stakeholders

Network Configuration and Management
- Completed various training exercises utilizing Cisco Packet Tracer to build network diagrams and configure networks
- Learned to configure end devices, routers, servers, and switches
- Used techniques such as layer switching and trunking, Spanning Tree Protocol, static routing, and inter-VLAN routing to create smaller internal and external networks that could communicate securely
- Utilized Wireshark to be able to filter and capture packets and block malicious IPs using firewalls

Cybersecurity/Information Technology
- Learned security compliance audits by having to determine if government and company security policies were being adhered to, given what security controls were in place and type of data being stored
- Established prioritization framework for implementation of specific administrative controls
- Final write-up summarized recommended controls needed and identified regulations under violation

LEADERSHIP

Association for Computing Machinery – CSULA   **Los Angeles, CA**
Advanced Project Team Leader   Jan 2021 – May 2023
- ACM's purpose is to foster academic and professional interest in computing and related topics
- Developed simple applications and recreated popular games during breaks between semesters
- Taught software engineering and development topics to 30 club members per semester through live demos and presentations

Volunteer Income Tax Assistance e3 – Schurr High School   **Montebello, CA**
Vice President   Aug 2014 – Jun 2018
- The Tax Assistance organization supports low-income members of the Montebello community by preparing tax returns
- Led trainings to teach new members to determine client eligibility, and how to fill out the 1040-EZ tax return document

CERTIFICATIONS AND SKILLS

Certifications: Coursera Google Cybersecurity (Acquired Oct 2023); CompTIA Security+ (Planned Date: Feb 2023)
Technical: Java, C++, Python, C#, Linux, HTML, CSS, Bootstrap, SQL, Unity, Wireshark, Cisco Packet Tracer, AWS, Virtual Machines
Language: Spanish (fluent/native speaker), Japanese (proficient, 4 years of study)
Interests: Cyber Security, Information Technology, Software Engineering, Game Development, Robotics