Ronny N. Ismael

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EDUCATION & DEGREES

Bachelor of Science in Computer Engineering *Expected Graduation May 2024*
San Jose State University | San Jose, CA
Certification: Cybersecurity
Coursework: Object-Oriented Languages, Assembly Language Programming, Advanced Algorithms & Data Structure Design, Engineering Statistics, Discrete Mathematics, Circuit Analysis, Computer Architecture Design, Computer Networking, IoT Platforms, Operating Systems

Associate in Science in Mathematics *Graduated May 2021*
Associate in Science in Physics
Modesto Junior College | Modesto, CA
Coursework: Introduction to Programming, Problem Solving/Programming 1, Linear Algebra, Differential Equations

WORK EXPERIENCE

Engineering Technician | Nextest division of Teradyne *July 2022 - Present*
- Developed a React Native application using JavaScript and Expo Camera for QR code scanning, streamlining board repair and inventory management, integrated with Firebase Firestore for real-time data persistence
- Implemented state management in dynamic applications using React Hooks, and designed UI/UX with custom React Native stylesheets, adhering to responsive design principles.
- Collaborated in engineering best practices for semiconductor testing systems, focusing on system-level debugging and troubleshooting.
- Managed record retention, international logistics, and data integrity for Magnum systems, employing SQL for database management and creating data analysis and automation scripts.

Robot Technician | Starship Technologies *Sep 2020 - June 2022*
- Served as the primary point of contact for Mountain View and Intuit operations, managing app support with agile methodologies, and leading teams through expansion projects, marketing events, and menu configurations.
- Utilized Python in Linux environments, employing SCP and SSH for secure data transfer and remote system management, to ensure optimal performance of the autonomous robotic fleet through rigorous software debugging and hardware diagnostics.
- Specialized in complex PCB repairs and operations, including Raspberry Pi, ELMOS Controller PCBs, and TEGRA PCBs, integrating IoT principles for robotic functionality and using Jira, Confluence, Excel, and MRPeasy for project tracking and inventory management.
- Developed technical documentation on AMD and TEGRA components, employed sensor calibration techniques for precision in robotics, and managed staffing and scheduling leveraging project management skills.

PERSONAL PROJECTS

Dynamic Personal Website (ronnyismael1.github.io) | *HTML5, CSS3, JavaScript, Git, GitHub*
- Developed a responsive personal website using HTML5, CSS3, and JavaScript, demonstrating skills in front-end development, responsive design, DOM manipulation, event handling, and dynamic content loading for seamless UX across devices.

Inventory Tracking App | *React Native, Expo, JavaScript, Firebase, Camera API, React Context API and Hooks*
- Developed a cross-platform Barcode Scanning App using React Native, Expo, and Firebase, demonstrating skills in JavaScript, mobile development, UI/UX design, cloud computing, and real-time database management.
- Implemented QR code scanning and state management using device camera integration, React's context API, and hooks, showcasing expertise in hardware integration, advanced React patterns, and asynchronous programming.

Concurrent Word Frequency Counter in C | *C, pthreads, GCC, Valgrind, VS Code, Git, GDB*
- Developed a multithreaded application in C, utilizing the POSIX threads library (pthreads) for concurrent processing of large text files.
- Implemented a custom hash table for efficient word count tracking, demonstrating a deep understanding of data structures and algorithms.
- Utilized mutexes and condition variables to ensure thread-safe operations on shared data structures, showcasing proficiency in concurrent programming and synchronization primitives.
- Employed dynamic memory management in C, including the use of malloc and free, to handle data storage, demonstrating a solid grasp of memory management concepts.

TECHNICAL SKILLS

- Programming Languages: C, C++, Python, Java, JavaScript, HTML, CSS
- Software Development: React Native, VBA
- Hardware Description Languages: Verilog, SystemVerilog
- Assembly Languages: x86, RISC-V
- System Tools: Linux (SCP, SSH), Git (Version Control), Jira (Project Management), Confluence (Documentation Management)
- Core Skills: Debugging, Troubleshooting, Task and Workflow Optimization, Project Management, Team Leadership