Hunter Rick

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EDUCATION

California State University, Chico   **December 2022**
*Bachelor of Science in **Computer Science***

Dean's Honors List   **May 2022**
I have attained a 3.5 GPA or higher for units taken this semester.

VOLUNTEER EXPERIENCE

Open-source code contribution to Roc Toolkit | *C++, API, VirtualBox, real-time, Git*   **November 2023**
- Programmed a dynamic print statement utilizing CLI argument inputs to show list of supported audio interfaces and their corresponding audio protocols
- Followed Continuous Integration and Development (CI/CD) guidelines with the use of GitHub Actions
- Adhered to coding contribution guidelines by running linters, unit tests, and build scripts correctly
- Studied documentation for 150,000+ lines of code base and documented my code changes with Doxygen

PROJECTS

DES 56-bit Key Cracker with Parallel Computing | *C, mpi, nanoPI, SSH*   **February 2022 − June 2022**
- Implemented a brute force solution in c with parallel processing to cracking a 56-bit des key to decrypt a text file
- Used 240 cores from two clusters of 30 4-core nanopi's with the mpi library
- Compared runtime speed for linear and parallel solutions at different bit lengths for both worst and best case scenarios
- Predicted and compared theoretical speed increase to real speed increase of runtime with Gustafson's law

HTTP Server hosted Keylogger | *C, mpi, nanoPI, SSH, Fedora Linux*   **February 2022 − June 2022**
- A white hat hacking keylogger application to expose vulnerabilities in a personal routers security
- Reported text logs of the victim's keystrokes to the hackers desktop via a secretly hosted http server built from a python script with socket programming
- Made use of selenium's browser automation in headless mode to secretly login to a victim's router and created a port forward to allow for http server hosting

Personal Portfolio Web App | *React, Vite, Vercel, JavaScript, CSS, HTML*   **September 2023**
- Hosted on Vercel at hunterrick.com with custom domain name using Record DNS and deployment of a remote GitHub repository
- Utilized JavaScript to enable real-time interactivity of scrolling links, and contact forms
- CSS styling that allows for consistent sizing on all desktop veiwport sizes

Pathfinder 2e Initiative Tracker | *C++, fastjson, Bash, GNU Make*   **January 2023 − Present**
- Developing an offline app that handles the initiative rules for the table top role playing gaming pathfinder 2e
- Utilizing third party fastjjson library to read in JSON formatted character and enemy stat blocks from third party sources
- Tracks turn order, rounds, conditions, and persistent damage with maps for each combatant and allows for automatic rolls of dice based on read in json input

TECHNICAL SKILLS

Languages: C++, C, Python, Javascript, SQL, Bash Scripting, Go, HTML, CSS
Frameworks: React, Django, Vite
Developer Tools: Docker, Unit Testing, Firebase, Vercel, Linux, Google Cloud Platform/GCP, Wireshark, VMware, VirtualBox, GDB, Git, MariaDB, SQLite
Libraries: Selenium, mpi, pthreads, openMP, fastjson, ncurses, QT Creator
Concepts: CI/CD, tcp/ip, Data Structures, Algorithms, Product Management, Development, Software Engineering, Hardware, Debugging, Testing, Computer Architecture, Documentation, Software Development

WORK

Line Cook   **September 2023 - Current**
- Deliver exceptional customer service as a line cook at Cinepolis, with teamwork in a fast-paced environment.