

Daelon Shockley

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PROFESSIONAL EXPERIENCE

Huhtamaki North America

May 2024 – Aug 2024

Applications Development Intern

DeSoto, KS

- Developed a web application for organizing case-level labels printed on Huhtamaki production floors. This application utilizes an SQL database created in Microsoft SQL Server Management Studio, the data collection for which I was largely able to automate using powershell, saving our team time. My primary focus for this internship was developing an IT facing application built in Sencha Architect using JavaScript that concisely displays all existing labels, along with their associated characteristics. This application allows the user to easily add, delete, or edit any label information as necessary by utilizing a variety of PHP scripts to interface with the database. This project allowed for a significant improvement in the organization and ability to maintain Huhtamakis large set of customer labels.
- As a secondary focus, I assisted Huhtamaki's AI Pilot team in rolling out Microsoft Copilot to nearly 300 Huhtamaki employees across 25 countries. For this, my role primarily involved analyzing user feedback to determine whether the reception of this tool was positive or negative, and to determine which areas users may want additional training in, in order to present recommendations to the team.

EaglePicher Technologies

May 2023 – Aug 2023

Computer Engineering Intern

Joplin, MO

- As a Computer Engineering Intern, I applied my hardware and software skills to develop projects which increased the efficiency, accuracy, and convenience of EaglePicher's test lab. My time at EaglePicher consisted of three primary projects:
 - Developed an automated temperature control system for the lab's temperature chambers using a python program. A programmatic PID loop was included to quickly account for the difference in the air temperature and battery temperature in the chamber. This system enabled unattended testing, allowing tests to be run outside of work hours and without technician intervention.
 - Created an intuitive and user friendly configuration application for the lab's data acquisition systems, replacing manual .cfg file editing by technicians. This reduces the risk of user error, increases the speed of configuration changes, and allows technicians without specialized system knowledge to make edits.
 - Added functionality to an existing procedure file viewing application, enabling reading complex procedure files, including those with cycles and nested calls. Implemented an event time estimation feature. Caught and corrected a preexisting error consuming system hard drive space.

SKILLS

Programming Languages: C#, Python, C++, HTML, CSS, Rust, Assembly, JavaScript, Visual Basic, MATLAB

Software: Visual Studio, Sencha Architect, Altera Quartus, Microchip Studio

Hardware: Soldering, Oscilloscope, Breadboard, Microcontrollers

Cybersecurity Skills: Threat Modeling, Snort, Flaw Finder, Encryption Techniques

Other: Communication, Public Speaking / Presentations, Research, Professional / Technical Writing, Problem Solving

EDUCATION

Missouri University of Science and Technology

December, 2024

BS Computer Engineering

Rolla, MO

- 3.7/4.0 GPA, Magna Cum Laude, Kummer Vanguard Scholar

RELEVANT COURSEWORK

Software Focus: Data Structures, Intro to C++ Programming, Computational Problem Solving

- In these courses I've developed fundamental software development skills, learning best coding practices, algorithms, documentation, data structures, and all manner of skills relevant to writing effective, efficient, and maintainable code.

Low-Level Computing Focus: Computer Organization and Design, Microcontrollers and Embedded Systems, Operating Systems, Real-Time Systems

- Through these classes I've rounded out my broader understanding of computers, touching on topics such as scheduling algorithms, memory allocation, assembly/machine code, and computer organization. These courses are notable for their large number of hands-on projects, including designing simulations, programming microcontrollers, writing literature reviews, and similar projects.

Networking Focus: Wireless Networks, Intro to Computer Networks, Intro to Communication Networks

- These courses have allowed me to gain an understanding of network topologies, protocols, routing and switching, performance analysis, and error correction and detection schemes, even implementing many of these concepts myself in simulations.

Hardware Focus: Electronic Devices, Circuits I, II, Digital Logic

- In these courses I've come to understand how electronic systems work at the most fundamental of levels, gaining experience understanding, designing, and analyzing electronic and logical circuitry.

Cybersecurity Focus: Computer Security, Security Operations and Management

- These courses have taught me the foundations of cryptography, software security, network security, reverse engineering, access control, and many other critical topics in security, including applying these skills in a variety of interactive assignments.

Other/Misc: Digital Signal Processing, Engineering Ethics, Senior Design I, II, Physics I, II, Calculus I, II, III, Differential Equations, Linear Algebra, Chemistry I, II, Principles of Speech, Research and Argumentation, Statics and Dynamics

PERSONAL PROJECTS

CypherSafe Password Generator and Secure Login Storage App

CypherSafe is a lightweight C# Windows application which generates random passwords fitting user specifications utilizing a cryptographically secure RNG algorithm, and allows users to store login information securely on their local disk in an encrypted manner. Logins are encrypted with AES, the keys for which are generated based on the user's password, ensuring a unique and secure encryption for each user.

<https://github.com/DaelonShockley/CypherStore>

EXTRACURRICULAR ACTIVITIES

Missouri S&T Valorant: Team Captain, In-Game Leader	Jan 2024 - Dec 2024
Missouri S&T Rocket League: Program Manager, Event Organizer, Caster, Player	May 2022 - Dec 2024
Missouri S&T Chess Club: Vice-President, Founding Member	Sep 2021 - Sep. 2023
American Concrete Institute: Vice-President, Secretary	Sep 2021 - Mar. 2023
Mars Rover Design Team: Science Analysis Team Member	Sep 2021 - Dec. 2022
Engineers Without Borders: Atahuallani, Bolivia Team Member	Sep 2021 - May 2022
Speech and Debate: Team Captain, State Quarterfinalist	Sep 2016 - May 2020

PUBLICATION

Ryan, M., Robles, A., Brinker, G., Shockley, D., & Cox, N. (2022, October). Science system for a prototype Mars Rover. University of Arizona Libraries. <https://repository.arizona.edu/handle/10150/666952>

- o Won best undergraduate student paper at the International Telemetry Conference 2022