

Emmeline Pearson

emmeline.pearson@gmail.com · [LinkedIn](#) · [GitHub](#) · (206) 669-1064 · Cleveland, OH

EDUCATION

Drexel University (Philadelphia, PA) - Expected Graduation March 2024

M.S. Computer Science

Case Western Reserve University (Cleveland, OH) - Graduated May 2019

B.S. Computer Engineering, Minor in Computer Science

SKILLS

Coding Languages: Python, Java, C#, SQL, MongoDB, TypeScript, JavaScript, Arduino, MATLAB, and HTML/CSS

Frameworks: Flask, Spring, React and Vue

Relevant Course Work: Algorithms, Data Structures, Operating Systems, Databases, Software & Mobile Architecture, Networks, Human Centered Design (UI/UX), Security, and Artificial Intelligence (AI)

Development Tools: Git/GitHub, TFS, Jira, Agile methodology, Docker, Postman, MSSQL, Jenkins, Linux and Visual Studio

EXPERIENCE

Software Engineer Intern at MRI Software (Solon, OH)

May 2023 to August 2023

- Updated the import/export feature's allow list to reach 1:1 parity with PMX windows solution.
- Developed automated API tests using postman and integrated them into Jenkins.
- Researched playwright, for use in the development of automated web app tests and created a team tutorial on how to use the new tool. Implemented playwright tests for new Application Studio pages.
- Managed finances for intern fundraising projects which collectively raised over \$12,000.

Embedded Software Engineer at Rockwell Automation (Cleveland, OH)

July 2019 to July 2022

- Developed safety and security critical embedded software features in C++ for programmable logic controllers (PLCs) as part of a 6-person agile development team.
- Designed and developed firmware features in real-time, multi-threaded systems, for high availability industrial automation products, which increase controllers' reliability and maintainability.
- Implemented automated functional tests, development tests, and unit tests in parallel with software development to verify firmware functionality and quality. Testware was written in python and C++.
- Debugged and troubleshooted firmware using an on-chip debug interface (Lauterbach Trace32).

Software Engineer Intern at Cerner Corporation (Kansas City, MO)

May to August 2018

- Developed an OAuth secured login page and enforcement system for an internal development web API uplift using Java, JSP, and Spring framework as a member of an Agile/Scrum development team.
- Presented work at the end of the summer in a cross-group meeting with global partner teams.
- Mentored a high school student through learning Java to start his own project.

Undergraduate Researcher in Medical Device Development (Cleveland, OH)

January 2017 to May 2019

Biomedical Imaging Department, Case Western Reserve University

- Advanced a prototype for a more efficient device for Cystic Fibrosis detection in infants.
- Created a more precise data processing technique using sovitsky-golay filtering and parabolic interpolation to generate a smoother curve fit and more accurate output concentration values.
- Translated the data processing code from MATLAB and Arduino based into C++. This allowed the device to be compacted to a handheld device which used a microprocessor rather than a computer.

ORGANIZATIONS

- Elected member of Student Leadership Council on Climate and Sustainability
- Society of Women Engineers (SWE)

CERTIFICATIONS

- Climate Change AI Summer School Certificate
- Security Journey Yellow Belt: Secure Development C/C++ Track
- NCESS Computer and Electrical Fundamentals of Engineering (FE) Certification

July 2023
April 2020
October 2020