

Emmeline Pearson

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

EDUCATION

M.S. in Computer Science from Drexel University - Philadelphia, PA - March 2024

B.S. in Computer Engineering from Case Western Reserve University - Cleveland, OH - May 2019

SKILLS

- Coding Languages: Python, Java, C#, SQL, MongoDB, TypeScript, JavaScript, Arduino, MATLAB, and HTML/CSS.
- Frameworks/Technologies: Flask, Angular, Node.js, Vue.js, .NET, and Bootstrap CSS.
- Development Tools: Git/GitHub, TFS, Visual Studio, Jira, Agile, Scrum, Postman, Microsoft SQL Server Management Studio (SSMS), Jenkins, Linux, and Playwright.

EXPERIENCE

Full Stack Software Engineer at MRI Software (Solon, OH)

October 2023 to Present

- Developed and tested features for Report Builder, an Angular web application, as part of the framework infrastructure team. Created new APIs and enhanced the front-end to improve performance and usability.
- Implemented OAuth login functionality utilizing Okta for identity verification, adding security for the user.
- Led the upgrade of the project from Angular 8 to Angular 14, incorporating linting and managing third-party package dependencies. This upgrade added important bug fixes, and increased the speed of the angular app.
- Modernized an ASP.NET and C++ project by moving to Model-View-Controller architecture and rewriting in C#.

Software Engineer Intern at MRI Software (Solon, OH)

May 2023 to August 2023

- Improved import/export functionality in the web-based property management solution (PMX) to achieve 1:1 parity with the PMX windows solution. The web-based significantly enhances usability.
- Developed and executed automated API tests using Jenkins, improving testing efficiency and coverage.
- Led research on playwright, a tool for automating web application testing. Presented a comprehensive demo for the team, paired with other developers, and created a detailed tutorial for future use.
- Managed finances for intern driven fundraising projects which successfully raised over \$12,000.

Embedded Software Engineer at Rockwell Automation (Cleveland, OH)

July 2019 to July 2022

- Engineered safety and security-critical embedded software features in C++ for programmable logic controllers (PLCs) within a collaborative 6-person agile development team.
- Designed and developed firmware features for real-time, multi-threaded systems in high-availability industrial automation products, enhancing the reliability and maintainability of controllers.
- Implemented automated functional, development and unit tests in parallel with software development to ensure firmware functionality and quality, utilizing Python and C++.

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

May to August 2018

- Created an OAuth secured login page for an internal web API using Java, and Spring framework.
- Presented project outcomes in a cross-group meeting with global partner teams at the end of the summer.
- Mentored a high school student, guiding him through learning Java for his project.

Undergraduate Researcher in Medical Device Development (Cleveland, OH)

January 2017 to May 2019

- Advanced prototype of a Cystic Fibrosis detection device for infants by creating a more precise data processing technique, using filtering and parabolic interpolation, to generate more accurate output value.
- Translated the data processing code from MATLAB and Arduino based into C++, facilitating the downsizing of the device into a handheld size (using a microprocessor) rather than a full-sized computer.

CERTIFICATIONS

- Security Journey Yellow Belt: Secure Development C/C++ Track
- NCESS Computer and Electrical Fundamentals of Engineering (FE) Certification

April 2020
October 2020