

**SUMMARY**

Experienced engineer looking to transition into software development. Passionate about software and technology, and is generally proficient with programming concepts and environments. Excellent problem solving, process design, and engineering skills.

**KEY QUALIFICATIONS AND STRENGTHS**

Software Design and Engineering • C#/.Net Proficiency • Git Proficiency • GUI Programming • Problem Solving • Process Design and Engineering • Project Management/Execution • Financial Analysis • Communication • Teamwork

**EDUCATION AND TRAINING****Undergraduate College**

Michigan Technological University  
BS Chemical Engineering, 3.62 GPA (Cum Laude)

Houghton, MI  
April 2016

**Misc**

- Complete C# Masterclass, Udemy, Oct-Nov 2020
- Continuous Improvement Program Training, DTE Energy, 2018-2019

**SOFTWARE DEVELOPMENT EXPERIENCE****Overview**

Completed variety of self-motivated research, courses, and projects. Proficient with most modern languages (i.e. C#, C++, Python, JS, etc) and can adapt to any development environment. Specialized in C# and .Net programming, which I use to develop my own applications. Comfortable on any OS and command line.

**Database Editor**

Actively developing graphical application to manage data stored in files or databases. Project is a work in progress, but I have already hit multiple important milestones. Source code: [github.com/Cshooltz/Data-Editor-App](https://github.com/Cshooltz/Data-Editor-App)

**Accomplishments**

- Designed 3 reusable threading strategies for handling UI process-blocking tasks
- Created embedded file manager for viewing and manipulating local files
- Implemented drag and drop to move files in file manager
- Developed custom table UI for viewing and editing data
- Integrated Newtonsoft.JSON for serialization of data to text files

**WORK EXPERIENCE****Natural Gas Transmission Pipeline and Facilities Engineer, DTE Energy, Detroit, MI****2017-2020**

Primarily responsible for managing and executing capital projects ranging in cost from \$10,000 to \$1MM+. Executed 10-20 projects per year on facilities located across the state of Michigan. Performed conceptual and detailed engineering and design, reviewed and approved construction drawings, drafted and issued pressure control procedures, procured materials and services, coordinated construction activities, and performed detailed financial analysis.

**Accomplishments**

- Standardized department's documentation and document storage
- Implemented new project management system and strategies to improve project execution efficiency and reliability
- Created standardized calculation spreadsheets for common tasks that were previously not standardized
- Collaborated with inter-dependent departments to improve workflows and communications
- Resolve conflicts between DTE and outside customers and created mutually beneficial solutions for challenging problems