M. Elijah Wangeman

Software Engineer



ABSTRACT

Curious, adaptive, and excels at communication. Excited for an opportunity to further my industry experience in software engineering, and to work in a team where I can learn and collaborate as much as possible.

EXPERIENCE

AUG - DEC 2022 (FULL TIME)

TEOCO

Full Stack Software Engineer

Worked 45 hours a week as a junior developer helping to bring an Angular SPA product to release. Used Conductor to produce bulk data analysis for the back end. Followed an Agile approach to bringing a Kendo UI based corporate data management application to customer readiness. Industry experience with C#, Java, Typescript, & SCRUM collaboration.

JAN - MAY 2022 (SCHOOL PROJECT)

Software Engineering 261

Online Store

Worked as part of a team to build the front and back end of an e-store. A Java front end used the REST API to interface with a Java middle end following the Model-View-Controller pattern, which sent requests to a MySQL database hosted on a Raspberry Pi. This infrastructure allowed unprecedented flexibility, reliability, and testability. Worked under SCRUM with Maven, Angular, and team planning experience. Utilized Git version control, branches, and detailed documentation (JavaDoc) to practice modern software industry methodology.

(RIT)

Courses

MATH: Calculus, Linear, & Discrete.

CS: Theory, Data Structures & Algorithms (*Java*).

Programming: Mechanics of Programming (C; memory management and pointer math), Concepts (MIPS assembly; interfacing with hardware and bitwise logic), Intro to AI (Python; decision trees, perceptrons, prolog, symbolic and convolutional neural networks), Machine Learning (Sci-Kit, tensorflow; cleaning data, training models, and developing pipelines with industry tools), SWEN-261 (Java, TypeScript, Angular, SQL), Parallel and Distributed Systems (C#), Databases (SQL), PLC (Java; building lexer, syntax analyzer, transpiler), Programming Skills (Rust; ownership, traits, lifetimes in production ready code).

Physics: Quantum Technologies (Dirac notation & matrix representation to construct and test quantum circuits, especially QKD), Quantum Computing (qiskit & QASM; quantum algorithms and gates), Emerging & Low Dimensional Materials 789 (fabricating graphene transistors; characterizing with AFM, SEM, STEM, Raman scattering, et cetera).

SKILLS

Collaboration & Communication

Most comfortable in teams working with and around people. Effective at communicating concepts across disciplines. Very fast and competent reader (800 wpm), even in complex topics. 3 years Chinese, 1 year Arabic & ASL.

OBJECTIVE

Internship as a full stack software engineer (with interests in embedded programming and DevOps), available May - December 2024.

EDUCATION

2020 - 2025

BSc Computer Science

Quantum & Philosophy Minors Rochester Institute of Technology

HONORS

RIT Presidential Merit Scholarship 2020 - 2024

& Dean's List

Rochester Institute of Technology

Philosophy Club Treasurer 2022-24

Rochester Institute of Technology

OCT 2020 Eagle Rank

> Earned bronze palm and performed hundreds of hours of community service. Scouts BSA, Catalina Council, Troop 115

AP Scholar with Honor MAY 2020

> Excelled on 11 AP Exams and scored 99th percentile on SAT (1510) and ACT (35).

Astronomy Achievement Award, MAR 2.02.0

> Original and Creative Problem Solving in Mathematics, Excellence in Earth

and Space Science, et al.

Computational Astrophysics Research Southern Arizona Research, Science, and

Engineering Foundation

Junior Science and Humanities FEB 2020

Symposium at ASU

Invited to present astrophysics research

at youth research conference

EXPERTISE

Rust, C, Java, Python, Julia, LANGUAGES

Haskell, SQL, HTML5, CSS,

Bash, Type & JavaScript

Linux, OS X, Vim, Git, LaTeX, TOOLS & SYSTEMS

Windows, Adobe Suite, Angular

Public Speaking & Presentation, GENER AL

Academic & Technical Writing, SMT Soldering & PCB Design