

Tim Severance

Tim.Severance@proton.me | 304-445-5424 | [in/timothyseveranceii](https://www.linkedin.com/in/timothyseveranceii) | [gh/fishslips](https://github.com/fishslips)

Software developer with a strong background in Computer Architecture, C++, Python and .NET

Experience

Utah Valley University - Computer Science Instructor

Sep 2022 to Present

- Created and delivered lectures for Advanced C++, Algorithms and Data Structures, Design Patterns, and Computer Architecture
- Developed GradeKit to automate the grading process for student assignments
- Exhibited strong software development expertise by designing, coding, and troubleshooting complex projects

Ironwood Experts LLC - Junior Software Developer

May 2021 to Dec 2021

- Developed and maintained software using python for data analysis and visualization for large patent cases
- Collaborated with cross-functional teams to design new features
- Optimized applications for performance and applied design patterns for improved scalability

Project Experience

kxi Compiler, Assembler, and VM

Jan 2021 to May 2022

A compiler for the kxi programming language

Technologies: C#, LINQ, .NET 6, ANTLR4

- Designed and implemented a compiler, assembler, and vm for the kxi programming language using .NET 6
- Developed a lexer and parser using ANTLR4, LINQ, and visitor design pattern to generate an AST for intermediate and target code generation
- Implemented robust error handling and reporting, ensuring projects met tight deadlines

GradeKit

Nov 2024 to Present

A tool using canvasapi to pull assignments from Canvas

Technologies: Python, PostgreSQL, SQL, InstructLab, sqlalchemy, Docker, ETL

- Implemented an ETL pipeline using Canvas' REST API to extract and transform Canvas data before loading it into PostgreSQL
- Utilized AI to provide experimental feedback on student submissions
- Deployed a docker image for easy setup and use by instructors
- Increased workplace efficiency by 65% by automating the grading process for student assignments

EZResume

Feb 2025 to Present

A tool to beat the slog of applying to jobs by automating the process with a JSON resume

Technologies: Python, JSON, YAML, HTML, CSS, ETL

- Developed a resume generation system that extracts and transforms JSON/YAML to HTML to PDF and DOCX formats
- Optimized the resume submission process by automating adjustments for specific job requirements
- Reduced the time spent on resume creation and submission by 80%

Education

Utah Valley University

2022

B.S. in Computer Science