Enthusiastic and curious, self-taught software developer that audited Harvard's CS50 to better understand computer science research, leading to the adoption of recreational software development. Professional interest was inspired by an invitation to the Google Foobar coding challenge. Transformed personal fascination into professional career during the process of acquiring requisite technical knowledge of Foobar challenge. Eager to grow individually while maximizing business impact within a collaborative team. Appreciates clear, concise, and performant code.

PROFESSIONAL WORK EXPERIENCE

Notable Projects:

Project A: Lead front-end and core back-end developer on a mid-sized, highly redundant and scalable automation project that reduced engineering time required to run critical tests by more than 80%, and is used for characterization and validation of every IBM Power system shipped.

Project B: Co-developed web-hosted control and logging dashboard that controls scientific instrument operation via binary command API wrapper, with data stored in Db2 for historical graphical analysis on that same dashboard. **Project C**: Refactored scientific instrument automation software, reducing execution overhead from approximately 12 minutes to about 1 minute (10x speedup). Integrated Project C into the back-end of Project A, enabling full functionality through Project A's GUI, with the additional automation capabilities of Project A.

IBM (International Business Machines Corporation)

July 2024 - present

Founded in 1911, IBM is an American multinational tech company that currently operates in over 175 countries. At 293k employees, and a market cap of \$228 billion, it is the largest industrial research organization in the world.

Software Engineer

Austin, TX

- Develop tools for IBM engineers within Infrastructure, including: workflow and process automation, web-hosted applications, various databases (DB2/SQL/NoSQL), GUI and CLI tools and applications.
- Interface with clients (IBM engineers and employees) to obtain functional requirements; respond to client-reported problems; debug, design, test, and deploy software patches (features and bug fixes).
- Work with Agile teams of 2 to 24; refactored and wrote thousands of lines of production code; refactors and/or redesigns often reduce LOC, while increasing readability, extensibility, and performance.
- Stack: Python (Pandas/Polars, Dash/Plotly/AG Grid/Dash Bootstrap Components), Docker/Podman, Redis, Linux, Db2 (SQL), Javascript, HTML, CSS, Java, Perl, Shell/Bash, proprietary technologies.

GCTA (Goodwill Career and Technical Academy)

April 2022 – January 2025

Goodwill Industries International Inc. is the largest nonprofit provider of job training and career placement services in North America, with over 15,000 workforce development staff serving 1.7 million North Americans annually.

<u>Lead Python Instructor</u> | August, 2022 – January, 2025

Austin, TX

- Enabled multiple classes to achieve 100% certification; raised certification rate to near 100% all-time average.
- Improved and expanded all existing curriculum; responsively quadrupled available study materials and resources.
- Developed and administered the initial stages of an internship program.

Python Co-Instructor | April, 2022 – August, 2022

Austin, TX

• Lectured, developed and presented Python demonstrations, expanded curriculum, and tutored students.

EDUCATION

• CS50: Intro to Computer Science, edX (Harvard)

MOOC

• 6.034: Artificial Intelligence ("old AI"), OpenCourseWare (MIT)

MOOC

• Texas A&M University - Nuclear Engineering

College Station, TX

SKILLS & INTERESTS

- Interests: volunteerism, learning, biking, snow sports, architecture, traveling, personal projects, logistics games
- Tech/Skills: git, Agile/Kanban, CI/CD, GUI/CLI, APIs, technical writing, strong reasoning and visuospatial

References available upon request.