

JOEY SHI

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TECHNICAL SKILLS

Languages: Scala · Java · Python · TypeScript · JavaScript · HTML5 · CSS3 · C/C++ · SQL

Frameworks/Libraries: Angular · Node.js · D3.js · Flask · Pandas · PyTest · Javalin · ScalaTest

Tools/Technologies: Visual Studio · Neovim · Vim · Zsh · PowerShell · tmux · Git · Arch Linux · Docker

EXPERIENCE

Visier Inc.

April 2023 – Present

Software Developer II

Vancouver, BC

- Worked as an independent contributor for both the Data Connectors and Data Workflows teams.
- Implemented data visualization libraries and UI components in Angular to simplify the data load configuration process.
- Developed high-priority data onboarding tools that addressed customer needs, directly enabling contract renewal.
- Monitored and maintained critical AWS cloud functions to ensure compatibility with our core application.

University of British Columbia

Jul 2020 – Apr 2023

Teaching Assistant

Vancouver, BC

- Led tutorials for multiple sections of the computer networking course: CPSC 317.
- Designed PrairieLearn exam questions for CPSC 317.
- Accommodated first-year calculus tutorials for multiple sections.

Vital Mechanics Research

May 2022 – Oct 2022

Software Developer

Vancouver, BC

- Researched topics in geometry processing and CAD software for clothing simulation.
- Developed a pipeline for extracting garment geometry and stitch information from 3D file formats.
- Applied numerical methods and graph theoretic approaches to infer information about garment stitching.

PROJECTS

PC Builder Website | *Java · Angular · SQL · Docker*

Nov 2023 – Present

- Implemented a full-stack web application for browsing PC builds and picking PC components.
- Designed an SQL database schema and REST API to support a variety of CRUD operations.
- Wrote build scripts and docker-compose files to streamline the deployment process.
- Self-hosted the application on a home Linux machine.

Multiplayer Browser Platformer | *TypeScript · Node · Socket.IO*

Dec 2021 – Present

- Designed a real-time multiplayer browser platformer using the Canvas API.
- Built a backend web socket API to update and broadcast player data.
- Implemented core game logic, such as player movement, animation, physics, map rendering, and collision.

Differential Equation Solver | *Python · Matplotlib · Tkinter*

Dec 2019 – Present

- Implemented efficient finite difference algorithms to solve ordinary and partial differential equations.
- Designed a graphical user interface in Tkinter and added animated plots for visualizing the generated solutions.
- Built a CI/CD pipeline with PyTest, Tox, and Github Actions.
- Published the application on the Python Package Index.

EDUCATION

University of British Columbia

Sep 2018 – May 2023

Bachelor of Science | Combined Major in Computer Science and Math

Vancouver, BC

- Cumulative GPA: 91%
- Dean's Honour List (2018 – 2021); Science Scholar (2019)

SCHOLARSHIPS

Stanley M. Grant Scholarship in Mathematics

Jan 2021

Charles and Jane Banks Scholarship

Sep 2020

Trek Excellence Scholarship

Aug 2020