

JULIET SHAFTO, PH.D.

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SKILLS JavaScript, TypeScript, Python, Django, Flask, Express, React.js, Vue.js, AWS-CDK, SQL, Docker, HTML5, CSS3

EXPERIENCE

Software Engineer | Dryden Group

July 2021 - February 2025

Dryden Group provides procurement consulting to enterprise businesses. In my role as a software developer I worked with internal analysts to develop software that makes procurement consulting more effective and saves clients more money.

- Expanded and maintained a web application (Django/Vue stack) with tools for storing, cleaning, aggregating, and analyzing large purchasing datasets allowing analysts to offer advanced benchmarking services to clients.
- Implemented a full redesign on marketing site (Vue/Nuxt.js) to showcase available services and attract new clients.
- Created a custom portal and user dashboard (Vue) for clients to streamline client access to our business analytics and visualizations in order to increase client retention.
- Collaborated on an advanced product matching and price comparison tool using natural language processing (Python with spaCy, scikit-learn) and large language models (gpt-4o API) to match and confirm equivalent product SKUs across suppliers, identifying tens of thousands of dollars of potential client savings.
- Used agile methodologies with a small team to implement new features, working closely with end users.

Module Instructor | App Academy

November 2020 - July 2021

As a module instructor at App Academy, I was the lead instructor and subject matter expert for a unit comprising Python, Flask, Docker, and deployment. I was responsible for leading a team of instructors developing and presenting instructional material.

- Taught full stack development with React/Redux, Python/Flask, deployment on Docker.
- Guided 100+ students through group and solo projects, encompassing the planning, documentation, and end-to-end development of a novel full-stack web application.
- Developed learning materials, demos, lectures on a variety of topics: using ORMs, database schema design, boto3 library for AWS, SocketIO, Docker, with hundreds of viewers.

OPEN SOURCE

Lead Developer | Midst | [midst.press](#)

2024 - Present

Midst is poetry authoring software for the online poetry journal (Midst.press) that allows poets to write and publish poems as interactive timelapses. The Midst application is a change-tracking text editor that allows the user to re-experience every keystroke of a poem's history.

- Built Midst version 2—a reimplement of the core Midst concept—that improved reliability, cross-platform support, speed, and resource usage on a modern technology stack (Typescript/Electron/React).
- Implemented a new algorithm for tracking changes that reduced file sizes by a factor of 50 over the previous version of the software, fixing issues with data loss from the prohibitively large file sizes.
- Maintained backwards compatibility with poems written in the Midst v1.

EDUCATION

App Academy - Immersive software development course with focus on full stack web development, student portfolio projects listed below (Nov 2020)

- Poemlapse | (React/Redux, Flask, SQLAlchemy) | [live](#) | [github](#)
- SimpleDecks | (React/Redux, Node.js, Express, Sequelize) | [live](#) | [github](#)

Carnegie Mellon University - Ph.D. - Cognitive Neuroscience (May 2019)

Reed College - BA - Psychology (May 2013)

OTHER EXPERIENCE

Graduate Student Researcher

Carnegie Mellon University, August 2013 - May 2019

- Designed and carried out a series of theoretically-motivated novel experiments in the domain of human neuroscience to advance understanding of the neural underpinnings of complex object perception.
- Used R and Matlab, with ggplot2 to analyze and visually represent complex neuroscience datasets.
- Gave lectures, designed course materials, supervised undergraduate teaching assistants, managed student behavior, and provided mentorship to students for various courses within psychology and neuroscience.