Steven Gu

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EDUCATION

M.S. Computer Science — Northwestern University **B.A. Biological Sciences** — *Northwestern University*

Expected JUN 2024 Expected JUN 2024

GPA - 3.78/4.00

Coursework — Agile Development, Data Structures & Algorithms, Scalable Software Architectures (AWS), HCI (UI/UX)

SKILLS

Programming Languages Python, JavaScript, TypeScript, C#, C++, C, R

Frontend React, Remix, HTML/CSS, Bootstrap, MUI, AvaloniaUI

Backend / Dev Ops SQL, MongoDB, Firebase, AWS, Flask, Express, Node.js, Cypress, Vitest, Unit Testing Other

Agile, AI/ML, Web Dev, Git, Linux, Bash, Unity, Networking, Generative Methods

WORK EXPERIENCE

Fullstack Software Engineering Intern —The New Muses Project

JULY 2023 — OCT 2023

- Designed a reusable Remix component library adhering to design specifications to streamline and standardize future webpage development.
- Setup Cypress unit tests and ensured continuous integration on GitHub Actions.
- Developed Flask-based backend APIs for effective front-end to MongoDB interaction. Automated database backup with a crontab scheduled Python script, with comprehensive emails upon completion.

Fullstack Software Engineer —Campus Kitchen Management System

APR 2023 — JUN 2023

- Led agile development on a full-stack web application using React frontend and Node.js/Express backend to manage food inventory, shift records, and user records for Northwestern University's Campus Kitchen.
- Deployed scalable backend infrastructure to AWS, using S3, RDS, and IAM services to support data storage, processing, and user access permissions.
- Led research and design sprints to gather user feedback on prototypes, resulting in clearer understandings of user needs and improved user-centered UI/UX designs.

PROJECTS

Agile Development and Prototyping

SEP 2023 — MAR 2024

- Developed 5 unique React/Firebase mobile web products in an agile environment. Automated software delivery (CI/CD) with GitHub Actions and unit testing with Vitest.
- Met with clients weekly with new prototypes and communicated software and agile concepts to manage project objectives and client expectations.

Crafty — Developer

SEP 2023 — DEC 2023

- Built a GPT-powered webservice dedicated to assisting users in crafting woodworking projects by providing users with instructions, materials, and purchase links given a query (e.g. "coffee table").
- Integrated GPT function calling to prompt webscraping and Home Depot API calls on corresponding queries.

PhotoApp — Developer

APR 2023 — JUN 2023

- Built a multi-tier photo storage app with a Python client, Node.js/Express.js-based webservice, and AWS.
- Implemented EC2, S3, and RDS for image storage, achieving efficient scalability and database management.
- Created and managed SQL database and APIs to ensure scalability and secure client-side querying.
- Developed and fully documented RESTful backend API for the webservice.