

SARAH A. YU

Software Engineer

Creative and detail-oriented full-stack software engineer with 2 years of experience in application design, development, testing, and deployment.

EXPERIENCE

Software Engineer

Aug 2023 – Present

Resilient Coders

Boston, MA (Remote)

- Developed responsive and dynamic full-stack web applications, integrating user authentication, REST APIs, and manual and automated testing (unit, integration, e2e).
- Built and maintained databases, ensuring data security and scalability, reducing query response times by 40%.
- Established test automation strategies, decreasing manual testing time by 50%.
- Troubleshoot and debugged code, improving product stability and user experience.
- Trained and deployed an AI chatbot, projected to generate significant cost savings by optimizing internal business workflows related to employee onboarding and support.

Projects:

dnaMe (Full-Stack Engineer)

dnaMe.up.railway.app

- Designed and developed a web application to analyze users' DNA for genetic predisposition to Alzheimer's disease.
- Extracted data from DNA files over 630,000 lines long, and interpreted genotypes and Alzheimer's risk, ultimately presenting findings in an easily comprehensible manner.
- Built appointment booking system between users and genetic counselor accounts.

Ascend Notes (Full-Stack Engineer, QA Engineer)

ascend-notes-app-client.fly.dev

- Managed a team of 6 in constructing a web application for note management, allowing users to create, edit, and delete notes.
- Incorporated and automated unit, integration, and end-to-end testing, achieving 100% client-side and 90% server-side coverage.

Nourish (Front-End Engineer)

nourish.up.railway.app

- Led a team of 4 in creating an app to connect Philadelphians with community fridges.
- Added interactive map, detailed fridge information, and community messaging board.
- Employed UI/UX design principles and created UI components in React, enhancing user engagement and ease of interaction with the platform.

Private Tutor

Mar 2021 – Aug 2023

Various Clients (Freelance)

Boston, MA (Remote)

- Taught customized lessons to strengthen subject comprehension and critical thinking.

Founder and President

Aug 2017 – May 2021

Carnegie Mellon University Science Olympiad

Pittsburgh, PA

- Directed an organization of over 100 members in hosting science competitions for thousands of youth across the nation, promoting equitable access to STEM education.
- Raised over \$40K from sponsors like General Motors.
- Received awards for educational outreach and organizational excellence:

Gelfand Student Educational Outreach (2020)

Outstanding Student Organization Program (2019)

Research Assistant

Sep 2017 – Mar 2019

Carnegie Mellon University

Pittsburgh, PA

CONTACT

xsarahyu@gmail.com
linkedin.com/in/xsarahyu
github.com/xsarahyu
xsarahyu.github.io/portfolio

EDUCATION

B.A. Biological Sciences

Carnegie Mellon University

– May 2021

- 3.57 GPA, High Honors
- Courses: Principles of Computing, Fundamentals of Programming

SKILLS

Programming Languages:

- JavaScript, Python
- SQL

Front-End Development:

- HTML, CSS, jQuery
- Bootstrap, Tailwind
- React, Vite, Flowbite
- AJAX, Axios

Back-End Development:

- Node, Express, EJS
- REST APIs, Postman

Databases:

- MongoDB, Mongoose
- MySQL

Data Visualization:

- NumPy, Matplotlib

Testing:

- Jest, Vitest, Cypress

Operating Systems:

- Windows, WSL
- Linux (Ubuntu)
- macOS

Other:

- AWS, Docker
- Git, GitHub
- GitHub Actions
- Agile, Scrum, Kanban
- Project management
- Figma, Miro
- UI/UX design

CERTIFICATIONS

Responsive Web Design

freeCodeCamp – Aug 2023