

# 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](https://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](https://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](https://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

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[linkedin.com/in/xsarahyu](https://linkedin.com/in/xsarahyu)

[github.com/xsarahyu](https://github.com/xsarahyu)

[xsarahyu.github.io/portfolio](https://xsarahyu.github.io/portfolio)

### EDUCATION

#### B.A. Biological Sciences

*Carnegie Mellon University*

Aug 2017 – 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, Kanban
- Project management
- Figma, Miro
- UI/UX design

### CERTIFICATIONS

#### Responsive Web Design

*freeCodeCamp – Aug 2023*