

# 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** *Apr 2024 – Present*  
*Eastern Virginia Medical School (Contract) Norfolk, Virginia (Remote)*

- Designed and developed a modern, user-friendly website for a medical school undergoing rebranding and merger with another institution.
- Analyzed existing data to determine system migration and integration strategies, ensuring seamless transition of information.
- Implemented robust security measures to safeguard sensitive medical information and ensure compliance with HIPAA regulations.

**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.

**Private Tutor** *Mar 2021 – Aug 2023*  
*Various Clients (Freelance) Queens, NY (Remote)*

**Founder & 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.

### 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.
- Employed UI/UX design principles and created UI components in React, enhancing user engagement and ease of interaction with the platform.

### CONTACT

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