Randy Sim

(718) 715-9910 • Brooklyn, NY • randy_sim@brown.edu • github.com/randysim • linkedin.com/in/randysim • randysim.me

Education

Brown University	Providence, RI
B.S. in Computer Science	Sep 2025 — May 2028
Stony Brook University	Stony Brook, NY
Computer Science (33 credits), GPA: 4.0	Aug 2024 — May 2025

Skills

Languages: Java, Python, C/C++, Javascript/Typescript, C#, HTML/CSS
Frameworks: React, Next.js, Spring Boot, Angular, Django, Express, Flask, .NET
Tools: AWS, Digital Ocean, Docker, Git, Linux, Linode, Netlify, Node.js, PostgreSQL, Supabase, Redis, RabbitMQ

Work Experience

MDLand — Great Neck, NY
Software Engineer Intern — Jan 2025 — May 2025

- Built Flask API with Zendesk integration serving 1,000+ clinics for streamlined ticket management.
- Achieved 100% integration test coverage using pytest suite.
- Enhanced iClinic, MDLand's flagship product, by integrating Zendesk into existing C# .NET infrastructure.
- Collaborated using Bitbucket and Jira for task management and version control.

Stony Brook Campus Residences — Stony Brook, NY
Software Engineer — Sep 2024 — May 2025

- Designed and maintained real-time dashboards for campus device monitoring using C# .NET, Express, React, and SQL, supporting 100+ professional staff.
- **Rebuilt PrintStats**, Stony Brook's official printer dashboard. Migrated the entire C# .NET backend to Express.js, utilizing asynchronous functions to achieve a **1,100% improvement (6 min → 30 sec) in loading printer metadata** via SNMP.
- Modernized CI/CD by replacing legacy Jenkins + IIS setup with Github Actions and dev containers. Tripled throughput and reduced production failure rate to zero.

Personal Projects

epsilon.stuysu.org

- Founded Epsilon, an all-in-one platform **managing 400+ student organizations at Stuyvesant High School**; serves 3,300+ daily users for all club activities, room reservations, and school-wide events.
- Implemented **PostgreSQL** row-level security policies and custom Deno edge functions integrating Google APIs.
- Self-hosted Supabase Docker containers with custom webhook CI/CD on DigitalOcean
- Used Typescript, React, and react-router to create a responsive frontend deployed on Netlify.

opportunity.dev

- Co-founded opportunity.dev, a job-alerts platform helping students find, track, and secure internships.
- Developed backend with **Spring Boot**, implementing **one-time-password and OAuth exchange code system using Redis.**
- Integrated Stripe to embed a checkout form, manage and schedule subscriptions, and process payments.
- Created an **alerts microservice with RabbitMQ and Node.js** to handle real-time notifications.
- Built a responsive frontend using Next.js, shadcn/ui, Tailwind CSS, and TypeScript for a seamless user experience.
- Established CI/CD pipelines with Github Actions and deployed on Linode to ensure efficient updates.

News To Go

- Built an AI-powered news app using Angular and Django, transforming news articles into engaging videos. Amassed 100+ followers through daily automated content.
- Engineered a scalable video pipeline using Selenium, Ollama, and MoviePy. Built a job queue system with multithreading to support concurrent user requests on single-machine infrastructure.

Relevant Coursework

- **Data Structures and Algorithms:** Java
- **Systems Fundamentals:** C
- **Programming Abstractions:** Java, Python
- **Math:** Calculus I, II, III, Discrete, Linear Algebra