

# Robert Sun

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## EDUCATION

### University of Virginia

*Bachelor of Arts in Computer Science, GPA: 3.9/4.0*

Charlottesville, VA

Aug. 2021 - Dec. 2024

## EXPERIENCE

### Associate Software Engineer

December 2024 - Present

*Red Hat*

*Boston, MA*

- Contributed to the pipelines side of the OpenShift AI Dashboard by adding and improving components, engaging in UX discussions, patching bugs, running demos, and participating in code reviews
- Created the base of the instruct-lab form, a UI wrapper around a pipeline that allows users to fine-tune specialized AI models using custom hyperparameters and data
- Added new features such as creating PVCs with granular RWX access, simplifying the workbench updating process, and adding workbench and hardware profile configuration alerts
- Increased code quality by refactoring unnecessary MLMD calls, removing unnecessary hooks, improving permission testing methods, and adding pass-through K8s calls, which removes backend overhead
- Was the primary onboarding buddy for new team members, and is currently mentoring an intern on the team

### Software Engineer Intern - OpenShift AI Dashboard Team

May 2024 - August 2024

*Red Hat*

*New York, NY*

- Engineered bug fixes for multiple parts of the dashboard, including pipeline and workbench errors, authorization vulnerabilities (based on Kubernetes RBAC), CI test failures, and general UI bugs
- Added Cypress end-to-end tests, created test functionality for intercepting MLMD requests, designed unit tests, improved repository-wide type definitions and narrowing, and configured ESLint rules which improved overall code quality and test coverage

### Software Engineer Intern - ConsoleDot Team

May 2023 – July 2023

*Red Hat*

*Remote*

- Constructed webpages, generated search indices, improved form rendering, increased viewport reliability, and made cleaner UIs in the Red Hat Hybrid Cloud Console website
- Developed validation scripts for Kafka requests and JSON files and crafted Cypress end-to-end unit tests for web pages. These efforts successfully identified bugs and bolstered backend and frontend reliability

### Undergraduate Teaching Assistant

Aug. 2023 – Dec. 2023

*University of Virginia School of Engineering*

*Charlottesville, VA*

- Held office hours and graded various assignments for a software development class containing 481 students

## PROJECTS

### Flashcards Website | [easyflashcards.org](https://easyflashcards.org)

April 2024 – Dec 2024

- Creating a flashcards website where users can collaborate and develop flashcards using rich-text editors
- Using React, TypeScript, Next.js, Prisma, Express.js, Docker, and JavaScript

### Book Blog Website | [robertsrandomreviews.com](https://robertsrandomreviews.com)

April 2024 – Dec 2024

- Created a personal book review blog using HTML/CSS, JavaScript, Tailwind, and Flask
- Devised API endpoints for overseeing posts and comment sections, and merged the New York Times API

### Mobile App Development | Dart, Flutter, PostgreSQL, Firebase

Dec. 2022 – Aug. 2023

- Built a trip planner mobile app where Users are able to log in using Google Sign-In services and share trip itineraries
- Integrated APIs to provide direction-by-direction navigation services. Built a ChatGPT API-powered trip planner

## TECHNICAL SKILLS

**Languages:** Python, TypeScript, JavaScript, Java, Dart, C, SQL (Postgres), HTML/CSS, R, Swift

**Frameworks:** React, Next.js, Express.js, Flask, Flutter, Django, PyTorch, JavaFX

**Developer Tools:** Git, Docker, Kubernetes, Hetzner Cloud, Linode, OpenShift, Firebase, VS Code

**Relevant coursework:** Advanced Software Development, Artificial Intelligence, Algorithms, Computer Systems and Organization, Internet Scale Applications, Mathematical Statistics, Intro. to Cybersecurity, Statistical Machine Learning