

# Akshat Jain

## EDUCATION

---

University of California, Berkeley

May 2022

Bachelors in Computer Science, Honors — GPA: 3.9

- **Extracurricular Activities:** [PlexTech](#) (Product Manager), [FinTech at Berkeley](#) (Payments Member), [IEEE](#)

## EXPERIENCE

---

### • Software Development Intern — Amazon

*Summer 2021*

- **E2E System:** Helped audit the illegal use of cookies against customer consent by developing an internal React application with a Java REST API (with test coverage in JUnit/ Mockito) deployed in serverless architecture.
- **IaC:** Automated the deployment of Cloud Infrastructure with the AWS CDK in TypeScript for frontend hosting, RDS (MySQL) configuration and Lambda integrations, thus reducing cloud management overhead.
- **Latency Optimization:** Resolved an issue of high cold-start times by setting up live Auto-Scaling for concurrency and optimizing for multithreading and asynchronous performance lowering average latency from 17s to 1s.

### • Software Engineering Intern — Polygon

*Fall 2020*

- **E2E Feature:** Automated client appointment and scheduling by utilizing Google Calendar and Zoom APIs with OAuth 2.0 to write a best-fit algorithm (linear time) in Python and implement it with Vue.js and FastAPI.
- **Chrome Extension:** Automated the tedious task of psychologists opening a document set in an external dated platform in a JavaScript Chrome Extension, reducing number of clicks needed from an average of 25 down to 2.
- **Documentation & Structure:** Redesigned the FastAPI server to lead to greater documentation (OpenAPI Standard), scalability, and security (Pydantic) by adding response/body models and RBAC to over 45 routes.

### • Software Engineering Intern — Visa

*Summer 2020*

- **Agile Workflow:** Led internal intern team in creating a POC, [Visa Curbside](#) by implementing agile management ideals such as sprint planning/review and leading team standups.
- **React Data Flow:** Utilized React's Context library and the Axios library to dynamically load data from the back-end API across 25 separate endpoints.
- **Architecture Rewrite :** Transitioned the existing Django architecture to a new FastAPI server, increasing performance by 300%, implementing automatic OpenAPI documentation, and scalable Pydantic data validation.

### • Undergraduate Research Assistant — UC Berkeley

*Jan 2020 - Present*

- **MERN Stack:** Built an internal full stack MERN application to interact with an EV charge-optimizing algorithm with secure authorization (JWT Tokens) and responsive UI Design.
- **Deployment:** Wrote a CI/CD pipeline (GitHub Actions) which ran a Pytest testing suite, containerized with Docker and utilized AWS tools (Elastic Beanstalk, DynamoDB) to serve application with scalability.

### • Software Engineering Intern — Hewlett Packard Enterprise

*Summer 2018 and 2019*

- **Data Analysis:** Built streamlined profile reports for millions of company open source vulnerabilities and customer data with Node.JS. This secured funding for an internal open source tracking application.
- **UI Updates:** Worked under an Agile workflow to add 38 mini-features and UI updates for an internal open source tracking application (VB.NET and JavaScript), improving user research reports.
- **Desktop Application:** Created a CRUD desktop GUI with Python (Tkinter) to paginate tens of gigabytes of sensitive product data and automate its data cleansing saving 2 hr/week of tedious manual labor.

## PROJECTS

---

- **Choices:** A mobile app that recommends items from an image of a menu. React Native, Python (Flask), Docker, GCP.
- **Smart Learn:** A Tkinter desktop game that analyzes academic metrics based on multiple subtle factors. Python
- **Close Cash:** A peer-to-peer ATM System with bank-like security. MongoDB, Express, React, Redux, Node.js.

## TECHNICAL SKILLS

---

- **Languages/Frameworks:** Python, Java, FastAPI, Flask, Node.js, Express, ReactJS, Redux, Angular, Vue, C/C++
- **Technologies:** AWS, GCP, MongoDB, SQL, Docker, Git, Jira, Selenium, Firebase, OpenCV