

# Akshat Sharma

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## EDUCATION

**Washington University in St. Louis** - BS in Computer Science + Minors in Human-Computer Interaction and Biology  
GPA : 3.95 / 4.00 | Graduating May 2022

## EXPERIENCE

### Software Engineering Intern, Quizlet

JUN - AUG 2021

- Developed a feature using **React**, **Redux**, **Jest**, **TypeScript**, and **PHP** to capture user-submitted confidence after completing a study session. Data helped product leads prepare upcoming projects for better personalization
- Helped design and implement new backend logic in **Kotlin** for calculating a user's progress during a study session to support future product features, such as new question type sequences.
- Won 3 awards during internal hackathon for designing and prototyping time based study sessions and knowledge graph driven dashboards of topics within a given course.
- Coordinated above projects with other team members through a ticket based system and daily standups.

### Algorithms and Data Structures TA, Washington University

AUG 2019 - PRESENT

- Tutored groups of students on a weekly basis for data structures and algorithms in **Java**.
- Empowered students to make real world connections with class content by finding and building visualization tools.
- Held weekly office hours to explain concepts and debug assignments for a 300+ person course.
- Emphasized the importance of time + space complexity when choosing a data structure for a specific problem.

### Frontend Developer, The Pandemic Archive

JUN 2020 - JUN 2021

- Collaborated with Design for America to create a website to let people record their stories during COVID-19.
- Built with **React** and connected to **Express** hosted on **AWS EC2** instance
- Led front end development by outlining development backlog with client and data types with backend team.
- Reviewed Figma wireframes made by our designer to streamline the site's UI and UX.
- Implemented a custom audio recorder with **WebRTC** APIs that reduced user recording file size by 71%

## PROJECTS

### [Maze Visualizer](#) - JavaScript, Web Workers, Parcel

MAY - OCT 2020

- Built click n' drag visualization tool for pathfinding algorithms to teach a data structures course.
- Implemented Dijkstra's, A\*, BFS, and DFS with heaps, queues, and stacks to ensure optimal performance.
- Prevented the UI thread from blocking during algorithm calculations by running them via Web Workers.
- Prioritized accessibility with semantic HTML, keyboard support, and appropriate ARIA tags.
- Interviewed data structures students to prioritize features and get feedback on my progress

## SKILLS

**Front-End:** React, TypeScript, JavaScript, Swift, Kotlin, HTML, CSS, SASS, Webpack, WebRTC

**Back-End:** Python, Node.js, Express, Java, PHP, MySQL, PostgreSQL

**CI/CD:** Git, GitHub Actions, Circle CI, Jenkins,

**Techniques:** Unit Testing (Jest), A/B Testing, API Design, Figma, a11y