

# ANANYA PANDEY

Fullstack developer (5+ years of experience) passionate about product-oriented engineering and building scalable systems.  
MS CS candidate @ UC Davis (Dec 2026), actively seeking Summer 2026 SWE Internships.  
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## TECHNICAL SKILLS

**Languages & Databases:** Java, JavaScript, TypeScript, Python, MongoDB, SQL

**Technologies:** Amazon Web Services (AWS), Node.js, Electron.js, Next.js, React.js, Spring Boot, Docker, Linux, Kubernetes, REST API, GraphQL, Selenium, JUnit, Jest, Apache Kafka, Tailwind CSS, Android

**Tools:** Git (GitHub, GitLab, Gerrit), CI/CD (Jenkins, Spinnaker), Jira, Grafana, Datadog, Splunk, Apache JMeter

## PROFESSIONAL SOFTWARE ENGINEERING EXPERIENCE

### Software Development Engineer II at Expedia Group

May 2022 - Nov 2023

#### **Project: A SaaS application to record and upload screens**

(1 yr. 6 mos.)

- Upgraded the application to handle concurrent video uploads by 1000+ users by designing API load tests in JMeter and fine-tuning running server count, scaling policy, and CPU/memory limits for the tool's backend microservice.
- Designed and implemented real-time mechanisms using Kafka and SQS to track crucial metrics and extract useful debugging information about application downtime, crashes, and missing recordings.
- Tested the performance of frontend and backend under low-bandwidth conditions to simulate the constraints of our target users and optimized the upload algorithm and server timeouts, which reduced upload failures.
- Ensured production-readiness of the application by increasing the total code coverage to 85% using Mockito and Jest.

### Software Development Engineer II at Zebra Technologies

Jul 2018 - Apr 2022

#### **Project: Wi-Fi stack customization for Zebra's enterprise-grade Android devices**

(3 yrs. 9 mos.)

- Developed and integrated proprietary inter-network and inter-subnet roaming algorithms into Android Open Source Project's framework layer and Qualcomm Wi-Fi drivers, significantly improving connection stability in complex enterprise environments like warehouses, airports, retail, and healthcare facilities.
- Calibrated the intra-network roaming behavior on a Synaptics Wi-Fi chipset, ensuring a flawless and uninterrupted switching experience between Wi-Fi access points.

## RECENT PROJECTS

### **Project: 1:1 Interview Slot Checker for GHC '25 Virtual Career Fair**

2025

- Built a configurable automation tool to monitor 45+ companies without overloading the interview catalog server and send real-time push notifications, enabling successful booking of 30/45 targeted interviews.
- Prevented runaway memory growth (from previously rising to 6GB and crashing to stabilizing usage at 500MB), added real-time crash alerts and optimized navigation to cut catalog scan time by 50%, allowing continuous, reliable operation throughout the interview booking period.

### **Project: LLM-Aided Code Documentation Generator ([github.com/ananya0996/lilmao.ai](https://github.com/ananya0996/lilmao.ai))**

2025

- Developed an LLM-powered documentation generator that produces accurate, module-level and feature-level docs for large codebases in minutes, reducing the overhead of maintaining up-to-date engineering documentation.
- Integrated a context-aware chatbot that indexes code and documentation to answer developer questions (e.g., identifying APIs to accomplish specific tasks, explaining unfamiliar code paths, etc.)

### **Project: A vulnerability aggregator for project dependencies ([github.com/ananya0996/vultra](https://github.com/ananya0996/vultra))**

2025

- Built a Python-based tool that analyzes Maven and npm project dependencies by querying vulnerability databases like GHSA (via GraphQL) and NVD (via REST) to report security issues with their type, severity, and patched versions.
- Created a testing framework to scrape pom.xml and package.json files from top-starred GitHub repos and validate Vultra's real-world effectiveness.

### **Project: An offline-first interactive textbook for programming ([luplab.gitlab.io/lupbook/home](https://luplab.gitlab.io/lupbook/home))**

2024-25

- Improved user retention and reduced student complaints in a browser-based interactive programming textbook by preserving code editor (CodeMirror elements) progress across sessions using IndexedDB.
- Automated the release mechanism for project dependencies, minimizing setup effort for new users.
- Added theme support to improve personalization and accessibility throughout the textbook.

### **Project: A web scraper to analyze footfall in national parks ([github.com/ananya0996/national-park-analysis](https://github.com/ananya0996/national-park-analysis))**

2025

- Scraped data from sources like the U.S. National Park Service (nps.gov), Berkeley TIMS, and Weather Underground using Python, BeautifulSoup, and Selenium.
- Integrated the collected data to enable correlation analysis between footfall in California's national parks and factors such as rare species sightings, weather patterns, and seasonality.

## EDUCATION

### Master of Science in Computer Science, University of California, Davis

Sep 2024 - Present

GPA: 3.8 / 4.0

(Expected Graduation: Dec 2026)

### Bachelor of Technology in Computer Science and Engineering, PES University, Bengaluru, India

Aug 2014 - Aug 2018

GPA: 8.21 / 10 (or 3.2 / 4.0)

(4 yrs.)