

OM KASHYAP AVASHIA

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EDUCATION

Ira A. Fulton Schools of Engineering, Arizona State University, Tempe, AZ May 2027
Bachelor of Science, Computer Science, GPA 4.0 (Dean's List, New American University Scholar)
Relevant Coursework: Data Structures & Algorithms, Introduction to Programming Languages, Introduction to Software Engineering

TECHNICAL SKILLS

Frontend: *React.js, HTML/CSS*
Backend: *Spring Boot, FastAPI, Web Sockets, REST APIs, JWT Authentication, Git*
Machine Learning: *PyTorch, Convolutional Neural Networks (CNNs), Data Synthesis & Generation*
Languages: *Python, Java, JavaScript*
Databases: *PostgreSQL, MySQL*

EXPERIENCE

IP Author, San Mateo, CA May 2025 - Present
Software Engineering Intern

- Developed a full-stack AI-driven legal contract generation and review system using **React.js, Python (FastAPI, LiteLLM)**, and **integrated Dify.ai with Tiptap** for seamless UX and real-time rich text editing.
- Reduced LLM response time from 16s to <2s** by implementing response token streaming through web sockets.
- Developed and deployed a scalable, responsive web application under tight time constraints.

PROJECTS

Expense Tracker | *Java, Spring Boot, PostgreSQL, Python, Streamlit*

- Developed a full-stack expense tracking app with a **Spring Boot REST API backend** and **Streamlit frontend**, using JWT authentication for secure login and session management.
- Built a multipage frontend with protected views, conditional access, and session-state token storage across pages.
- Simulated attack scenarios (SQL Injections, Brute Force Attacks) on **7 REST API endpoints and 5 unit tests** to ensure secure functionality.

ChromaLite | *Python, PyTorch, scikit-learn, pandas, matplotlib, NumPy, fluidsynth, librosa, music21*

- Designed a custom neural network from scratch for musical scale classification, achieving **80% classification accuracy**.
- Synthetically generated and labeled a custom dataset of **1900+ music samples** across **24 scales**.

OTHER EXPERIENCE

Project STEM, Remote Jan 2025 - Present
Python Teaching Assistant

- Debugged student Python scripts across syntax, logic, and runtime errors, providing structured explanations to accelerate assignment completion in AP CS Principles and CS Python Fundamentals.

StepUp Tutoring, Remote Jan 2025 - Present
English Tutor

- Tutored two middle school children, prioritizing one-on-one attention to improve reading and comprehension skills.

Math Tutor

- Tutored a middle schooler and taught her to count, add, and subtract larger numbers. Aug 2024 – Nov 2024

School of Mathematical and Statistical Sciences, ASU, Tempe, AZ Aug 2024 – Present
Instructional Aide/Grader

- Grading assignments and tutoring 50+ students in MAT117 (College Algebra) and MAT142 (College Mathematics).

LEADERSHIP

STEMathematics, ASU

President Aug 2024 – Nov 2024

- Seminar hosted: *The Mathematics of Artificial Intelligence*.

Outreach Coordinator Oct 2023 – Aug 2024

- Spearheaded outreach efforts to grow STEMathematics from 0 to 50 members in 3 months.
- Collaborated with various stakeholders to organize seminars on *p-Adic Numbers, Real Analysis, and non-Euclidean Geometry (faculty-led)*.