Anmol Joshi

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EDUCATION

University of Southern Mississippi Expected May **2028**
B.S. Computer Science | GPA: **4.00/4.00**
Coursework: AI, Data Structures & Algorithms, Secure Software Development, Operating Systems
Honors: Academic Excellence Award (**4**-year full tuition); President's List (**2024–2026**)

EXPERIENCE

AI Innovation Hub Intern | *Mississippi Department of Information Technology Services* Present
- Contributed to an AWS discrepancy-screening tool for investigators; screened **5,000** pilot records and cut initial review time **30%** versus manual screening.

National Communications Director | *Residence Hall Association, USM* **2025–2026**
- Connected USM with **15** university residence hall associations across the South Atlantic by managing communications among regional university student leaders.

Learning Assistant | *MAT 101S, University of Southern Mississippi* **2025**
- Supported students in solving MAT 101S problems by breaking down mathematical concepts and guiding them through step-by-step reasoning during class.

PROJECTS

SureLine | *TypeScript, Python, CesiumJS* **2026**
- Made coastal evidence explorable across **2** study sites by developing a CesiumJS interface that visualizes Grand Bay's **790** transects and **76** shoreline dates alongside historical errors, conditional projections, and environmental context.
- Verified **28** published data artifacts while integrating the two-site explorer by combining schema validation and browser checks with selective globe rendering, coordinate search, and production deployment.

multiDecompilerREA Extension | *TypeScript, REA, Ghidra, Kuna* **2026**
- Improved correct type recovery from **60%** to **78%** across **50** compiled functions by combining multiple decompiler outputs in a TypeScript REA extension and comparing results against source-code ground truth.

Trainer | *Swift, Python, FastAPI* **2026**
- Personalized workout recommendations based on recent activity and fitness goals by connecting a Swift iOS app to Python and FastAPI training logic.

SecureReview | *React, TypeScript, Tailwind, Node.js, Express* **2026**
- Detected **24** of **30** seeded vulnerabilities across **10** test repositories, with **5** false positives, by building a pre-push review tool with React, TypeScript, Node.js, and Express.

Sarega | *React, TypeScript, CSS* **2026**
- Consolidated **4** music-creation workflows into one workspace by building React tools for drum patterns, lyrics, vocal capture, and instrument recordings.

Barter | *React, TypeScript, Firebase* **2026**
- Enabled real-time shared-expense tracking across **3** use cases—roommates, trips, and group outings—by connecting a React and TypeScript interface to Firebase.

MedicTime | *Whisper, Llama **3,** ChromaDB, Kokoro TTS, FastAPI, Next.js* **2025**
- Enabled voice-based retrieval from **24,000+** medical documents by integrating Whisper, ChromaDB RAG, Llama **3,** and Kokoro TTS through FastAPI and Next.js.

SSH Brute-Force Detection Lab | *Splunk SIEM, SPL, Hydra, Kali Linux* **2025**
- Made simulated SSH brute-force activity visible in Splunk by generating attacks with Hydra and building SPL detections, tuned alerts, and investigation dashboards.

TECHNICAL SKILLS

Languages: Python, C++, Rust, JavaScript, TypeScript, Swift
Frameworks & Data: React, Next.js, Node.js, Express, Flask, FastAPI, PostgreSQL, Firebase, SQLAlchemy, Pydantic, ChromaDB
AI & Security: RAG, Whisper, Llama **3,** Hugging Face, REA, Ghidra, Splunk, Wireshark, JWT, bcrypt
Platforms & Tools: AWS, Docker, Linux (Kali, Debian), Windows, Git/GitHub, Hugging Face Spaces