Sai Rithwik Kukunuri

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EDUCATION

Arizona State University – Barrett, the Honors College　　　　**Aug 2024 – Expected: May 2027**
Bachelor of Science in Computer Science　　　　*Tempe, Arizona*
Minors: Data Science

Award: New American University - Provost's Scholarship

Cumulative GPA: 4.00/4.00

TECHNICAL SKILLS

- **Languages:** Python, Java, C++, JavaScript, TypeScript, Bash, HTML5, CSS3
- **Frontend:** React, Tailwind CSS, Next.js
- **Backend & Databases:** Node.js, Flask, PostgreSQL, MySQL, MongoDB
- **AI / Data Science:** TensorFlow, PyTorch, Scikit-learn, Pandas, NumPy, LangChain, RAG Pipelines
- **Cloud & Tools:** AWS, Azure, Docker, Git, Firebase, Tableau, Figma, Kubernetes

RELEVANT EXPERIENCE

AI-Powered Question Answering for Medical Procedures　　　　**January 2026 – Present**
Undergraduate Research Project　　　　*Tempe, Arizona*
- Built a RAG-based medical Q&A system using Groq Llama 3.3 70B and embeddings, grounding responses in 784 videos and 2,714 Q&A pairs.
- Developed a semantic retrieval pipeline with top-5 similarity search, reducing latency by 30% and enabling real-time inference at 70 tokens per second.
- Improved system response reliability by 25% through 20+ iterative test cycles and hardware–software integration on Meta Quest 3.

Project Lead　　　　**September 2025 – December 2025**
Arizona Technology Council – Data Integration & Insights　　　　*Tempe, Arizona*
- Led a 4-member team to build data tooling with Flask backends and React/TypeScript microservices, delivering scalable REST APIs and AWS integrations.
- Developed secure API-based data pipelines using Apache Hop and Spring Boot, reducing processing time by 55%.
- Led system architecture and documentation, improving team coordination by 40% within a $2,500 budget.

Project Management Intern　　　　**June 2023 – July 2023**
Saint Louis University　　　　*Remote*
- Coordinated a cross-functional team of 6 interns, improving project delivery efficiency by 35% through optimized task delegation and resource planning.
- Implemented Agile workflows, reducing project delays by 25% and ensuring 100% on-time completion for all deliverables.
- Presented performance metrics and progress summaries to project leads, driving more data-informed decision-making.

PROJECTS

Traffic Log Analyzer | *C, POSIX, pthreads*
- Developed a C-based application to process large traffic log files and compute key metrics such as peak traffic times and average vehicle counts.
- Implemented multi-threading using pthreads to run multiple parts of the file processing at the same time, improving performance compared to a single-threaded approach.
- Exported processed results to CSV files for visualization, enabling clear charts of traffic trends and peak intervals while emphasizing efficient memory management and data processing.

Student Question and Answer System | *Java, JavaFX, SQL, Git, Eclipse, Scrum*
- Engineered a full-stack Q&A platform enabling students to post, answer, and rate questions, improving user interaction flow by 35%.
- Designed and implemented backend services using Java and SQL, creating normalized database schemas and optimized queries to support multi-role user interactions.
- Followed Agile development practices, contributing to design discussions, sprint planning, and feature reviews to deliver production-ready code.

Personal Finance Manager | *Java, Swing, CSV, OOP*　　　　**GitHub**
- Developed a Java-based personal finance application to manage expenses, create budgets, and generate financial summaries through an interactive Swing interface.
- Designed modular OOP components such as ExpenseHandler, BudgetHandler, CSVHandler, improving data reliability and processing accuracy by 40%.
- Enhanced usability by refining UI workflows and optimizing key interactions based on user feedback.

LEADERSHIP / VOLUNTEERING

Software Developers Association　　　　**January 2025 – Present**
Marketing Officer　　　　*Tempe, Arizona*
Promoted workshops and developer events for a 3,000+ member community and designed visual content to increase participation and outreach.

Google Developer Student Club　　　　**September 2025 – Present**
Graphic Designer　　　　*Tempe, Arizona*
Designed visual assets for developer workshops, supporting engagement and communication for a 2,000+ member student community.