

SriUjjwal Reddy Beerreddy

Srisubspace@gmail.com | [Linkedin.com/in/sriujjwal](https://www.linkedin.com/in/sriujjwal) | [Github.com/sbeeredd04](https://github.com/sbeeredd04) | [Sriujjwalreddy.com](https://sriujjwalreddy.com) | 571-523-7182

Education

B.S. Computer Science

Arizona State University, Tempe, AZ

May 2026

GPA: 4.0

Coursework: Data Structures & Algorithms, Operating Systems, Software Engineering, Distributed Systems, Machine Learning

Experience

AI/ML Software Engineering Intern | Geometric Media Lab – Tempe, AZ

Jul 2024 – Present

- Boosted **gunshot detection** accuracy from **20% to 80%** by designing an ML pipeline that captured and preprocessed live audio data for training and inference, then deploying the model on a **Raspberry Pi** for field use in the South American rainforest, helping curb poaching.
- Developed ML pipelines and architectures for experimentation, using **pretrained VLM models** like **Gemini VLM API**, **Hugging Face**, and stable video diffusion models with **computer vision** across 6+ research projects for rapid prototyping and deployment of ML solutions.
- Built custom inference pipelines and identified efficient model configurations by architecting and experimenting with **PyTorch** ML models based on research papers, leveraging the SOL GPU cluster with **CUDA**, and using **wandb** for experiment logging and analysis.

Software Engineer | Mesa Historical Museum (EPICS) – Tempe, AZ

Aug 2024 – May 2025

- Led a **7-member team** through Figma design to production, translating wireframes into a **React/Vite** application with **Three.js** for interactive 3D museum exhibits showcasing historic individuals and landmarks.
- Architected a **CI/CD pipeline** on **Vercel** for automated deployments and shipped the application to a dedicated **kiosk display** by configuring a locked-down browser environment on the museum's TV hardware.
- Shipped a static-site solution using JSON data and **Vercel**, eliminating CMS dependency and reducing **maintenance costs** while ensuring fast, reliable access for museum visitors.

Software Engineering Intern | ASU Biodesign Institute – Tempe, AZ

Jan 2023 – Aug 2024

- Engineered a **Django/FastAPI backend** to automate DNA-PAINT image analysis for 100+ datasets, enabling researchers to process 2000+ nanorobot entities per image with **ML-driven clustering** and tracking.
- Optimized analysis time from **4 hours to 10–30 minutes** per image by building a scalable pipeline and REST API, delivering a user-friendly web interface for machine learning analysis and visualization.
- Documented codebase with comprehensive API docs and testing, streamlining onboarding for new engineers and enabling reproducible research workflows.

Projects

Puter OS | Open-Source Contribution to 33.7K+ star project

github.com/HeyPuter/puter

- Shipped the first real-time **notification system** for Puter OS, an **open-source** browser-based operating system, using **Node.js**, Express, **SQLite**, JavaScript, and Docker.
- Replaced the legacy view-once notification model with a **persistent storage layer**, enabling robust context tracking and improving platform reliability for 33.7K+ stargazers.

Mine Alliance | Hackathon Winner – \$1.5K Prize

github.com/LuaanNguyen/Mine-Alliance

- Built a full-stack platform (**Flask**, **React**) connecting companies, government authorities, and stakeholders with interactive **maps**, discussion boards, and **OpenAI API**-powered risk assessment for mining sustainability.
- Integrated an AI analysis engine that evaluates mine locations for environmental and wildlife risks, delivering actionable insights through a social-platform-style interface for transparent decision-making.

Sage AI - Data Science Tutor | Hackathon Project

github.com/sbeeredd04/sage

- Engineered a multi-user tutoring platform with **React**, **Flask**, and **Docker** containerization, integrating **OpenAI**, **Gemini**, and **Claude APIs** via a **RAG pipeline** for accurate, web-grounded responses.
- Managed GPU cluster resources using **Redis** and **Celery** for session and task management, and deployed a sandboxed code execution environment with **Monaco Editor** for scalable, hands-on data science education.

Activities

Director of Technology | Software Developers Association (SoDA)

Jan 2024 – Nov 2025

- Built and scaled SoDA's internal tools platform (Discord OAuth2.0-secured admin site, summarizer bot, and member rewards/storefront), supporting **3,000+ members** across multiple clubs (ACM, WiCS) and enabling secure, automated management.
- Empowered **600+ students** with hands-on software skills by leading an **11-member team** to deliver **12+ technical workshops** (Docker, Flask, Chrome Extensions) and hackathons, while fostering a creative and collaborative culture.

Hackathon Achievements | Various Hackathons

2022 – Present

- Won 5 hackathons**, earning over **\$8K** in prize money by delivering solutions using Python, Flask, React, OpenAI API, and Docker.
- Led teams and executed under pressure, demonstrating collaboration, problem-solving, and leadership across fast-paced, cross-functional MVP projects.

Skills

Languages: Python, C/C++, Java, JavaScript, TypeScript, C#, SQL

Frameworks & Libraries: Flask, FastAPI, Django, React, Next.js, Node.js, Express, PyTorch, TensorFlow, LangChain, LangGraph, Three.js

AI/ML & Data: OpenCV, Scikit-learn, NumPy, Pandas, Hugging Face, Wandb, CUDA, Computer Vision, RAG Pipelines

Cloud, DevOps & Tools: AWS, Docker, Nginx, Redis, Celery, PostgreSQL, MongoDB, Git, CI/CD, Linux, REST APIs, WebSockets, gRPC