Sreeram Goud Ranga

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EDUCATION

University of California - Berkeley ***Class of May 2027***

B.S. Electrical Engineering & Computer Science (EECS) & M.S. Computer Science *GPA: 3.72*

Relevant Coursework: Data Structures, Game Design, Databases, Machine Architecture, Machine Learning, Efficient Algorithms, Deep Neural Networks, Artificial Intelligence, Optimization Models, Operating Systems, Computer Vision

PROFESSIONAL EXPERIENCE

Software Engineering Intern, Deloitte **May 2025 – July 2025**

- Integrated agentic AI assistant for DevOps workflows via Jira, architecting a multi-agent Terraform orchestration system to translate natural-language requests into structured IaC workflows and boost cluster uptime by 17%
- Architected orchestration layer with FastAPI and Celery to manage IaC lifecycles, enabling AI-driven intent parsing (spaCy, Vertex AI), dynamic planning, execution, & validation – reduced provisioning time by 23%
- Engineered self-healing GKE pipeline by integrating Cloud Monitoring to ingest Prometheus-style metrics (CPU, memory, pod restarts) and setting SLO-based alerting policies – cut mean time to recovery (MTTR) by 18%
- Trained Vertex AI anomaly-detection model (92% pod-failure precision) on historical GKE telemetry and integrated Pub/Sub Cloud Functions for automated remediation (auto-restarting pods & scaling node pools)

Software Engineering Intern, Frore Systems **May 2024 – August 2024**

- Designed predictive maintenance pipeline with pandas & scikit-learn (Random Forest, Gradient Boosting) models on vibration, temperature, and current time-series deployed via Kafka & REST – cut unplanned downtime by 36%
- Implemented Statistical Process Control system in MATLAB and Python (X-bar & R control charts + Shewhart loops & PyVISA interfacing) to auto-calibrate contact-mic signal & reduce acoustic measurement errors by 38%
- Deployed embedded C++ firmware with optimized Reed-Solomon error-correction, GCC ARM toolchain, and Valgrind profiling – enhanced buffer management, resulting in an 18% faster power-response curve under load
- Collaborated cross-functionally to build Python-based acoustic stress-test suite using NumPy and SciPy FFT analysis, combined with real-time dashboard & crash detection algorithms – boosted detection accuracy by 22%

PROJECTS

ArcSim - AI-Driven Multiplayer Combat Balancer **November 2024 – Present**

- Built a multiplayer combat simulator that auto-balances champion abilities using reinforcement learning and Monte Carlo Tree Search, creating dynamic 1v1 and 5v5 matchups that evolve over simulated ranked seasons
- Designed character engine in Unity and Python, integrating ability parameters to generate simulated matches
- Optimized reward functions with TensorFlow RL agents to cut win-rate gaps and boost meta stability by 17%

AgriRisk **November 2024 – Present**

- Transformed crop insurance underwriting from regional to field-level accuracy by building digital farm ontology in Foundry that models crop plots with imaging, climate, soil, & claims data, enabling precise risk segmentation
- Deployed damage assessment on Palantir AIP & Google Earth Engine to analyze before/after satellite imagery
- Powered real-time risk monitoring using live weather feeds for rapid detection & response to emerging risks

LEADERSHIP EXPERIENCE

Head TA, AI Tools and Development **January 2025 – Present**

- Instructed 8 interactive AI workshops (LLM fine-tuning, autonomous decision loops), raising lab scores by 19%
- Curated 12 lecture modules and lab exercises on AI tool integration, resulting in seamless industry demos
- Mentored 43 students in weekly office hours and tutorials, earning an average teaching evaluation score of 4.8/5

President, Berkeley Phi Beta Lambda Consulting **May 2025 – Present**

- Directed club operations for 100+ members, cutting project turnaround time by 23% through targeted delegation
- Architected Fall 2025 vision by aligning 8 committee heads on 5 objectives, boosting joint initiatives by 17%
- Designed 10-week Internal Curriculum, teaching sessions to 56 students and boosting completion rates by 19%

ADDITIONAL

Skills: Python | Java | C | C++ | JavaScript | TypeScript | Golang | Git | TensorFlow | Django | PyQt5 | LLMs | Docker | Kubernetes | Valgrind | Amazon Web Services (AWS) | Data Structures | Postman | PostgreSQL | Machine Learning

Hobbies: Tennis (State Singles Player) | Bouldering & Belaying (V5 & 5.12) | Astrophotography (Airglow Waves)