# **Sreeram Goud Ranga**

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#### **EDUCATION**

## University of California - Berkeley

B.S. Electrical Engineering & Computer Science (EECS)

Class of May 2026

GPA: 3.72

**Relevant Coursework:** Data Structures, Cybersecurity, Databases, Machine Architecture, Machine Learning, Efficient Algorithms, Deep Neural Networks, Artificial Intelligence, Optimization Models, Operating Systems, Discrete Mathematics

#### 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**

#### **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

#### LuminVest

November 2024 - May 2025

- Developed AI wealth management platform that tailors advice using client portfolio, news, and personal data
- Crafted ML model using TensorFlow and scikit-learn, achieving 83% predictive accuracy on 90k+ data records
- Employed RNNs and LSTM networks for enhanced sequential processing and understanding of talking points
- Utilized LangChain to convert text inputs from wealth managers into SQL queries, boosting data-driven decisions

# 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 | Postman | Amazon Web Services (AWS) | Data Structures | Postman | PostgreSQL | Machine Learning **Hobbies:** Tennis (State Singles Player) | Bouldering & Belaying (V5 & 5.12) | Astrophotography (Airglow Waves)