

SUNAMI DASGUPTA

Berkeley, CA

☎ +1-530-636-5824 ✉ sunamidasgupta00@gmail.com 🌐 <https://sunamidasgupta.netlify.app> 🌐 [sunamidasgupta](https://www.linkedin.com/in/sunamidasgupta)

EDUCATION

California State University - Chico

2026

Bachelor of Science, Computer Science

Chico, California

GPA - 4.0 / 4.0

Data Structures & Algorithms, Statistics & Probability, Linear Algebra, Discrete Math, Object-Oriented Programming, Databases, Operating Systems & Calculus 1-3, ACM

EXPERIENCE

ESNET, U.S. Department of Energy

08-2023 - present

Software Engineering Intern

Remote, California

- Optimized the Site Resource Manager at the Data Link Layer, utilizing C++ and custom protocols, resulting in a **25% improvement in data packet integrity** and a 15% increase in network throughput.
- Designed and implemented an Orchestrator module using Kubernetes and Python, automating the deployment and scaling of network resources, leading to a 35% reduction in manual intervention and a **20% increase in operational efficiency**.

Lawrence Berkeley National Laboratory

05-2023 - 08-2023

Software Engineering Intern

Berkeley, CA

- Developed an automated data handling processes using Python, transitioning from static file storage to dynamic in-memory data handling, **reducing** the need for **storage space by 50%** and decreasing processing power requirements by 60%, leading to significant cost savings.
- Implemented real-time monitoring system using Prometheus & Grafana, resulting in **40% increase** in network visibility and control for high-performance data transfers.
- Implemented Docker containerization for SENSE applications, enhancing application isolation and **reducing** deployment **inconsistencies by 80%**.

HACKATHONS & RESEARCH

Spottr: Parking Lot Detection|Stanford University Hackathon '23

- Empty Spot Detection with Video Analysis:** Uses OpenCV for video analysis of parking lots, marking available spots green and occupied spots red for easy identification.
- Enhanced Image Processing:** Applies grayscale conversion, Gaussian blur, adaptive thresholding, median blur, and dilation in image processing for accurate parking spot detection.

FitTrackr: Personalized Workout Mapping|Princeton University Hackathon '23

- Designed for Endurance Athletes:** Merged data from Strava, Oura, Withings, and Spotify, providing a holistic view of athletic performance and health metrics.
- Leveraged Modern Tech Stack:** Utilized Docker for deployment, Python for backend functionality, and Flask for web server operations, enhancing efficiency and user experience.
- Awarded **Runner-Up** for the Healthcare Track.

1. Skin Cancer Detection using Image-Processing in Real-Time, IJTSRD, Volume-5, Issue-6, Oct. 2021

2. Detecting Breast Cancer with Logistic Regression Model, IJAEM, Volume-3, Issue-4, Apr 2021.

SKILLS & HONORS

Languages: C, C++, Python, Java, HTML5 / CSS, JavaScript, PHP, TypeScript, Bash Shell Scripting, MySQL.
Technologies/Web Frameworks: React, Node, Mongo, ExpressJS, Tailwind CSS, jQuery, Bootstrap, REST API, Mongoose, Linux/Unix, Docker, Kubernetes, Prometheus, Grafana, SQLite

1. Google Code Jam 2022, Rank: 607 out of 45,000.

2. CodeChef Global Coder 2021, Rank: 9 out of 60,000+.

4. Chico State Excellence Scholarship 2022 & 2023, 1 out 1,500+.

5. Linux Foundation Scholar 2022, awarded for most number of Open-Source contribution.