Sanjana Garimella

La Jolla, California
+1 (279) 977-6960 sagarimella@ucsd.edu LinkedIn Github Portfolio

Summary

Data Science graduate student at the University of California, San Diego and former Software Developer at IBM with experience in machine learning, automation, and data infrastructure. Skilled in Python, TensorFlow, Grafana, with hands-on experience in model development, scalable systems, and GPU-based research computing.

Education

University of California San Diego **2025 – 2027 (In Progress)**
Master of Science in Data Science *La Jolla, California*

- Relevant Coursework: Probability and Statistics, Data Mining

KL University **2019 – 2023**
Bachelor of Technology in Computer Science, CGPA: 3.65/4.0 *Vijayawada, India*

- Relevant Coursework: Machine Learning, Database Management Systems, Full-Stack Web Development (Python, Java), Artificial Neural Networks, Computer Vision, Algorithms, and Data Structures

Skills

Programming Languages: Python, Java, C++, SQL
Frameworks & Tools: TensorFlow, PyTorch, Flask, Django, Jenkins, Docker, Linux, AWS, Git, Grafana
Libraries & Technologies: NumPy, Pandas, Matplotlib, scikit-learn, REST APIs
Soft Skills: Problem Solving, Collaboration, Adaptability

Experience

University of California San Diego **La Jolla, California**
Research Assistant *October 2025 – Ongoing*

- Maintained and optimized Python-based analysis pipelines, Docker/Kubernetes environments, and MongoDB databases on the Voyager GPU supercomputer, improving workflow reliability for neuroscience research teams.
- Developed and automated deployment scripts to streamline workflows and improve system reliability across distributed research teams.
- Collaborated with researchers and developers to integrate tools, enhance data processing efficiency, and ensure computational reproducibility.

IBM **Bangalore, India**
Software Developer *June 2023 – June 2025*

- Assisted in automating security scans using Python, REST APIs, and Jenkins, enhancing vulnerability management across 18 subsystems.
- Created and tracked over 80 defects while collaborating with developers to enhance the MEND vulnerability tracking system and automate processes, impacting over 100 repositories across global teams.
- Managed power states across BMCs in CPC and I/O drawers within IBM z system, streamlining defect creation and issue identification using Python and Jenkins.
- Participated in the ISDL Hackathon and Developer Jumpstart Program, contributing Flask scripts and a multi-cloud provisioning prototype using LLMs. Collaborated on an IBM Research project for data analysis.

Intern *January 2023 - June 2023*

- Designed and implemented a Grafana dashboard hosted on a virtual machine, incorporating features such as self-signed certificate and LDAP user authentication, to consolidate and present security scan results to upper management for effective monitoring.
- Analyzed and automated time series data collection across multiple systems, improving vulnerability detection coverage and reducing manual tracking effort by **30%**.

Amazon **July 2022 – July 2022**
ML Summer Intern

- Participated in a competitive internship program focused on machine learning, engaging in expert-led discussions on supervised learning, deep neural networks, and reinforcement learning, gaining valuable insights into their practical applications in a tech environment.

Indian Servers **August 2021 – November 2021**

Machine Learning Intern

- Worked on Face Mask Detection project, gaining hands-on experience with machine learning and deep learning algorithms. This project demonstrated the application of AI to address real-world challenges during the COVID-19 pandemic.

Projects

Loan Eligibility Prediction | *Python, Machine Learning, Google Colab* **Oct 2021**

- Developed a machine learning model to predict loan eligibility, comparing algorithms such as Decision Tree, Random Forest, and Logistic Regression.
- Performed EDA, preprocessing, and feature engineering on loan datasets using Python libraries to improve model accuracy.
- Increased model accuracy by identifying Random Forest as the best-performing algorithm, improving prediction efficiency for loan eligibility screening.

Take a Trip | *Python, Django, HTML, MySQL* **May 2021**

- Led a team to develop a travel and hospitality management website facilitating trip planning for travelers exploring major cities in India.
- The platform featured curated destination suggestions, hotel bookings, and direct access to trusted travel agents, earning recognition as one of the best projects in college.

Accomplishments

Star of the Month Award: Recognized for enhancing the MEND vulnerability tracking system, improving tracking efficiency and streamlining onboarding for over **100** repositories in a shorter timeframe.

Team Award: Contributed to a team effort that streamlined security onboarding processes across 18 global subsystems, showcasing collaborative success.

People's Choice Award: Our team's MVP at the Developer Jumpstart Program received the People's Choice Award, underscoring our innovation and effective problem-solving, while achieving a **40%** reduction in cloud costs.