linkedin.com/in/sriharsha-gaddipati

Education

New York University

Ph: +1 6023886890

- Master of Science in Computer Science (GPA: 3.94/4)
- Coursework: Big Data, Distributed Systems, Data Structures and Algorithms, Network Security, Data Visualization

Indian Institute of Technology Palakkad

- Bachelor of Technology in Computer Science and Engineering
- Coursework: Machine Learning, Operating Systems, Database Management, Computer Networks, Compilers, Deep Learning

Technical Skills

- Programming Languages: C, C++, GO, Python, Java, JavaScript, React, NodeJS
- Software Development: Spring Boot, OOPS, Full-stack, PostgreSQL, NoSQL, MongoDB, DynamoDB, Redis, RabbitMQ
- Technologies: AWS, Azure, Agile, Docker, DevOps, CI/CD, TCP/IP, DNS, Frontend, Backend, HTML, CSS, Git, Linux
- Data: Big Data, MapReduce, Spark, Hadoop, NLP, Pandas, TensorFlow, PyTorch, ETL, OLAP, Redshift, Glue, MLOps

Work Experience

Graduate Assistant

New York University, New York

 Mentored a cohort of 100+ students in Artificial Intelligence, Deep Learning, Computer Vision, and Computer Architecture courses through tutoring hours, personalized guidance, grading, and troubleshooting assistance.

Associate Software Engineer

Turvo, Dallas (Remote - India)

- Booking Experience: Designed and implemented end-to-end workflow for fetching rates and booking shipments, resulting in a 20% reduction in processing time, while facilitating seamless collaboration among stakeholders.
- **Cache Laver Optimization**: Developed a comprehensive cache laver library for the application, integrating cache algorithmic techniques. Achieved a significant 40% reduction in latency and improved reliability leading to a responsive application.
- Large scale systems data analysis: Engineered optimizations that delivered an impressive 30% enhancement in SOL query performance. Leveraged advanced techniques such as indexing, query restructuring, and database tuning.
- System Architecture and Performance: Led the enhancement of caching throughput by distributing tasks using Redis PubSub and Redis Queues, bolstering performance by 35% and enabling horizontal scaling.

Data Analyst

Kantar Analytics, New York (Remote - India)

- Machine Learning Modeling: Collaborated within the LinkAI team to harness advanced AI/ML/DL techniques for extracting 9 key performance indicators on Video Advertisements.
- Infrastructure Optimization & Cloud Computing: Migrated high-cost virtual-machine-based infrastructure to a cloud-based pipeline structure reducing cost by 60%. Expertly utilized AWS Sagemaker, Lambda, S3, ETL, Redshift serverless compute.

Algorithm Engineer

IIT Palakkad, Kerala

- C++, Generative AI, Data Structures • Conducted research on unsupervised learning, implementing a Bayesian Generative Adversarial Network with a 5-dimensional latent space to address mode collapse in traditional GANs, resulting in a 30% improvement in output diversity and stability.
- Devised a parameterized algorithm to tackle the NP-complete minimum feedback vertex set problem. Incorporated techniques like Fixed-Parameter Tractable, Kernelization, and Approximation algorithms, reducing time complexity to below $3k^k$.

Research Analyst

TCS Innovation Labs, Hyderabad

- Data Processing and Data Analysis: Conceived and crafted a successful Power Trading Agent bot that adeptly predicted supply and demand dynamics. Achieved 1st rank in the PowerTAC tournament held in the competitive retail electricity market.
- **Predictive Modeling**: Employed LSTM models to develop robust predictive capabilities for energy consumption time series, achieving an MAE 2. This enabled the bot to discern intricate patterns in consumer and producer behaviors over time.

Projects

Twitter - Distributed System | Services Programming, GO, gRPC, Microservices

• Developed a minimal distributed Twitter app in Golang, employing ETCD as the storage system with RAFT algorithm for consensus, and availability. Utilized gRPC to communicate across 3 backend microservices to amplifying scalability.

Operating System | Systems Programming, Threads

• Built an OS of 250KB memory, 1MB disk that handles process, resource, and memory management. Implemented kernel routines including boot module, scheduler, process creation & termination, resource manager module, interrupt, and exception handler.

Compiler | *Functional Programming, Standard Meta Language (SML)*

Constructed a compiler for the Tiger language using SML to MIPS architecture. Performed lexical, syntax, and semantic analysis phases with an avg compilation time of 1 sec per 1000 lines of code.

Sep 2020 - Jul 2021

Aug 2019 - Jul 2020

Python, AWS, Scikit-learn, Pandas



Aug 2022 - May 2024

Aug 2016 - Jun 2020

Aug 2022 - May 2024

Artificial Intelligence, Deep Learning, Computer Vision

Java, System Design, Software Development Life Cycle

Jul 2021 - Aug 2022