

Sai Sunil Neralla

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EDUCATION

Arizona State University (Tempe, AZ)
Master of Science in Computer Software Engineering (CGPA: 3.7/4)

August 2022 – May 2024

GITAM University (Visakhapatnam, India)
Bachelor of Technology in Computer Science (CGPA: 8.64/10)

June 2016 – June 2020

PROFESSIONAL EXPERIENCE

Software Engineer | Copart | Dallas, Texas

January 2024 – Present

- Implemented and optimized **RESTful APIs** for **member registration, payments, and delivery** using **Node.js** and **TypeScript**, supporting **over 2M+ users**. Enhanced **UI performance with Angular**, reducing **UI-related bugs by 40%**.
- Collaborated on **back-end development** using **Java** and **Spring**, reducing **post-release issues by 60%** in an **Agile environment**. Automated **deployment processes with Jenkins and Spinnaker**, decreasing **release cycles by 30%**.
- Developed **real-time data streaming solutions** with **Apache Kafka**, improving **data consistency by 20%** and ensuring **data integrity through XML-based validation**, impacting **99% of critical workflows**.

Software Engineer | TCS | Hyderabad, India

September 2020 – July 2022

- Optimized the evolution of **5G nodes** by integrating **new service groups into cloud servers (cENM)**, enhancing **network management and FCAPS capabilities**, and improving system performance for **over 50 million telecom users**.
- Managed **FCAPS functions**, including **analysis, coding, patching, and deploying updates**, while validating **new node versions** and troubleshooting **root causes and bugs**.
- Improved **deployment efficiency** with **timely software upgrades** using **Maven, Docker, and Jenkins** for **CI/CD pipelines** while collaborating in **Agile environments**, testing **APIs with Postman**, and increasing **team efficiency by 15%**.

Software Engineer Intern | Grepthor | Hyderabad, India

May 2019 – July 2019

- Developed a **stock market prediction model**, influencing **investment decisions for over 1,000 clients** by leveraging **Python, Scikit-Learn, and NumPy** to extract and analyze **large datasets** while optimizing **machine learning models**.
- Identified and interpreted **trends in complex datasets** using **supervised and unsupervised learning techniques**, improving **overall project performance**.

SKILLS

- Programming Languages:** Java, Python, JavaScript, TypeScript, C, C++
- Databases, Cloud:** MySQL, MariaDB, MongoDB, Cassandra, Postgres, AWS, Azure
- Front-End Development:** Angular, jQuery, HTML5, CSS3
- Back-End Development:** Node.js, Spring Boot, Junit
- CI/CD, Build Tools:** GIT, GitHub, Maven, Docker, Kubernetes, REST APIs
- Certifications:** Salesforce Certified Developer - 1 | Introduction to Virtualization - VMWare | Python – NPTEL
- Soft Skills:** Adaptability, Communication, Customer focus, Problem-Solving, Patience, Teamwork, Time Management.

PROJECTS

Quick Cart E-Commerce API

- Developed **REST API** to solve slow backend operations and create a secure and scalable e-commerce platform using **Node.js, JavaScript, MongoDB, and Express.js**, supporting **1,000+ concurrent users** with **99.9% uptime**.
- Implemented secure **JWT authentication**, cutting unauthorized access by **90%** while reducing storage costs.

Scalable URL Shortener

- Developed a **full-stack** scalable URL shortener using **React (Tailwind CSS) + Spring Boot** that converts long URLs into shareable links, featuring a **RESTful API with JPA** supporting **PostgreSQL** while maintaining **99.9% uptime** for **1M+ conversions**.
- Implemented **input validation and rate-limiting**, reducing abuse by **95%** while maintaining service availability.

Healthcare - Semantic Web Application

- Solved data interoperability for **10+ healthcare providers** by designing an **OWL ontology**, enabling **5,000+ users** to retrieve unified records in **<1s**.
- Built a **SPARQL query interface** that reduced manual data aggregation time by **80%**, deployed on **Vercel** handling **1M+ monthly queries**.

Stock Sense - AI Stock Predictor

- Developed an ensemble model (**KNN + LSTM**) that improved prediction accuracy by **15%** (RMSE: 0.12) for 15 major stocks
- Achieved **87% trend prediction accuracy**, outperforming baseline models by **12%** through hyperparameter optimization.