Siva Kumar Reddy Surasani

Denton, Tx | sivakumarreddysurasani@my.unt.edu | | 9408437185

linkedin.com/in/siva-kumar-surasani-036a8414a/ | github.com/sivasurasani

Technical Skills

Programming Languages: C++, C, Java, C#, SQL, JavaScript, PHP, Python **Databases:** Microsoft SQL Server, MySQL, ElasticSearch, MongoDB, Redis

Web Technologies: JOuery, React, OOD, Operating Systems, RESTful API, JSON, Data Structures and Algorithms

Frameworks and Tools: .NET, Laravel, Flask, Git, GitLab, Docker, Kafka, NestJS, AWS, Lambda

Python Libraries: Scikit-learn, Numpy, Pandas, TensorFlow, OpenCV

Experience

Research and Instructional Assistant, University of North Texas – Denton, TX

Jan 2024 – present

- Anonymized large networks with K-core and Louvain, achieving 90% community detection efficiency.
- Assisted over 60 students in topics like heaps, trees, sorting, Dynamic, and greedy algorithms.
- Engaged in material science research, optimizing stress-strain data extraction and storage by 50%.
- Tools: Python, Machine Learning, Numpy, Pandas, NLP, Louvain, NetworkX, Json, and OriginPro.

Senior Software Engineer, JustDial - Bangalore, India

July 2022 - Aug 2023

- Developed APIs and login/signup web pages, improving verification speed by 30% using PHP, Python, and React.
- Developed a custom automation tool using Selenium that enhanced overall team productivity by 10%.
- Implemented tables, stored procedures and functions, improving database performance by 20%.
- Tools: PHP, Python, JavaScript, Redis, Selenium, MySQL, MongoDB, Gitlab, CI/CD, JQuery, and Typescript.

Software Engineer, Droom - Gurugram, India

Aug 2020 - June 2022

- Created web pages for auction of vehicles using PHP, Laravel, and Jquery resulting in a 10% increase in sales.
- Engineered listing-matching APIs in Golang, delivering top three best matches and boosting user traffic by 20%.
- Deployed microservices with Docker, improving deployment speed by 60% on development and QA servers.
- Tools: PHP, Laravel, ElasticSearch, JQuery, JavaScript, Python, MySQL, RabbitMQ, MongoDB, and Redis.

Education

University of North Texas, MS in Computer Science

Aug 2023 - May 2025

- GPA: 4.0/4.0
- **Coursework:** Graph Theory, Data Structures and Algorithms, Operating Systems, Databases, Feature Engineering, Machine Learning, Special Problems, Data Mining, and Software Engineering.

Projects

Accessibility Chatbot

github.com/sivasurasani

- Provides Accessibility Guidelines and best practices for crafting web applications.
- API built by finetuning BERT model with a custom data gave more than 90% accuracy.
- Tools: Python, Scikit-Learn, React.js, Flask, NLP, TensorFlow, RAG, and Amazon Web Services (AWS).

Candy

- A software tool used for inserting and deleting the edges in large networks with a success rate of 80%.
- Tools: C++, Graph Theory, and Git.

Certifications