

Siva Kumar Reddy Surasani

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SKILLS

Programming and Frameworks: PHP, Python, C++, JavaScript, jQuery

Back-end: API, Microservices, System Design, Postman

Databases and Storage: MySQL, Elasticsearch, Redis, MongoDB

Machine Learning and AI: Model Deployment, TensorFlow, Computer Vision

Web Development Practices: RESTful APIs, GIT, Agile, Jira, Ajax

EXPERIENCE

Research Assistant

Sep 2023 - Present

University of North Texas | Denton, TX

- Engaged in material science research, optimizing stress-strain graphs and extracting data from over 200 research papers.
- Performing in-depth analysis of 10 key parameters of materials using **AI models** and developing a custom model to predict high entropy alloy compositions.
- Developing software for graphs to insert and delete edges in large-scale social networks using OpenMP and C++.

Senior Software Engineer

July 2022 - Aug 2023

Justdial | Bangalore, India

- Developed in-house APIs, integrated third party APIs, and signup web pages for KYC management and payments.
- Created Restful APIS for Justdial's fintech vertical - 'Jdpay' which is generating daily transactions worth 20 Million INR.
- Optimized Relational database tables, APIs in backend systems using caching and modern optimization techniques
- Built a **Python**-based image cropping tool using OpenCV, increasing image processing efficiency.
- Integrated Jio APIs into the Justdial platform using PHP curl to facilitate payments and manage status of the transactions, including processing, refunds, and payment success or failure.

Software Engineer

Aug 2020 - June 2022

Droom | Gurugram, India

- Created web pages for listing creation, and auction management of vehicles enhancing user and seller experience, contributing to a 25% increase in listing efficiency and a 15% faster auction processing.
- Engineered listing-matching **APIs**, delivering the three best matches and boosting user traffic by 20%.
- Developed an AI-driven mechanism to recommend the top 5 vehicles based on user requirements integrating eco-inspection reports and boosting search efficiency and conversion rates.

EDUCATION

University of North Texas, Denton | Master of Science in Computer Science

GPA: 4.0 / 4.0

Indian Institute of Information Technology, Kota | Bachelor of Technology in ECE

GPA: 3.4 / 4.0

COURSEWORK

Graph Theory, Computer Networks, Data Structures and Algorithms, Operating Systems, Databases, Feature Engineering, Machine Learning, Deep Learning, Data Mining, and Software Engineering.

ACADEMIC PROJECTS

Accessibility Chatbot

github.com/sivasurasani/A11Y-ChatBot

- Provides Accessibility guidelines and best practices for building web applications using 1000 rows of data.
- API built by finetuning the BERT model with custom data gave more than 90% accuracy.
- Technologies: Python, Scikit-Learn, React.js, Flask, HTML, and AWS.

Portfolio Website

github.com/sivasurasani/portfolio

- Created a personal website showcasing projects, research, and skills with an interactive and responsive page.
- Technologies: CSS, HTML, and React.js

CERTIFICATIONS

Designing RESTful APIs

Machine Learning with Python: Foundations