Dorasanipalle Sathya prakash

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Portfolio: About Me | LinkedIn Profile | Leetcode | GitHub

Summary

Third-year B.Tech student in Computer Science and Engineering at VIT-AP, passionate about Artificial Intelligence, Machine Learning, and Data Science. Skilled in Python, Java, JavaScript, SQL, and TensorFlow, with hands-on experience in building scalable applications, conducting AI/ML research, and applying emerging technologies. Actively exploring Generative AI and new technology stacks to create innovative solutions. Key contributions include MedAI for disease prediction, DevTrack for project management, and research in Optimizing Crop Production . As Vice President of the CSI Chapter, successfully led coding events, hackathons, and tech-driven initiatives, demonstrating strong leadership, collaboration, and problem-solving abilities.

Technical Skills

- **Programming:** Python, Java, SQL, C++, C, JavaScript
- **Web Development:** HTML, CSS, JavaScript, React : Version Control: Git, GitHub
- **Databases:** MySQL, MongoDB, PostgreSQL : Data Visualization: Matplotlib, Seaborn, Power BI, Tableau
- **ML & AI:** Scikit-Learn, TensorFlow, Keras; Research in fields of AI/ML : Cloud Computing: AWS
- **UI & UX Designing:** Figma, Canva

Education

Bachelor of Technology in Computer Science   2023 – 2027
Vellore Institute of Technology – Amaravati
- CGPA: 8.58

Higher Secondary Education   2021 – 2023
Sri Deepthi Junior College
- Percentage: 97.2%

Secondary Education   – 2021
St. Joseph's High School
- Percentage: 100%

Experience

Research Contributor, VIT-AP University   Since Feb 2024
- Conducted research on ML algorithms for Cervical Cancer Prediction, with emphasis on model evaluation, comparison, and optimization and GAN-based Image Classification and Crop Optimization, advancing applications of AI in healthcare and agriculture.
- Authored AI/ML book chapters and currently working on filing a patent for AI-driven innovations.

Vice President, CSI Club and Chapter (VCode Team), VIT-AP University   Since Sept 2023
- Spearheaded major initiatives such as the 100 Days of Coding in Java, coding hackathons, workshops, and HackerRank/CodeChef contests and strengthened the community's coding culture through leadership, mentorship, and consistent technical engagement.
- Advanced personal skills in Java (projects like graph coloring) while exploring React, Node.js, advanced algorithms, and AWS.

Software Developer, Integrity Global Services   2023 – Present
- Designed and deployed websites and freelance solutions for real time problems.
- Developed real-time dashboards and intelligent applications using AWS services, REST APIs, and data pipelines and focusing on machine learning for automation and insights, contributing to improved client workflows and data-driven decision-making.

Publications

Optimizing Crop Production Through Smart Agricultural Practices: A Comprehensive Study on Soil Attribute Analysis - (ISAC3-2025)   2025

The study applied data analytics on soil attributes to identify patterns, enabling improved crop yield and sustainable agriculture practices. The research highlights how integrating soil attribute analysis with smart agricultural techniques can drive sustainable farming and resource efficiency.

Revolutionizing Farming Practices through Quantum-Inspired Soft Computing in Precision Agriculture - (Book Chapter)   2025

This book chapter explores the application of quantum-inspired soft computing techniques in precision agriculture. It highlights how advanced computational methods can optimize crop management, resource utilization, and yield prediction. The work emphasizes sustainable farming practices by integrating AI-driven models to address real-world agricultural challenges, paving the way for technology-driven advancements in the agricultural sector.

Certifications

- **Oracle Certified Professional: Java SE 17 Developer** – Earned certification from Oracle University, validating advanced knowledge in Java SE 17.
- **Oracle Cloud Infrastructure 2025 Generative AI Professional:** – Issued by Oracle University. This certification recognizes expertise in Oracle Cloud Infrastructure and Generative AI, officially recognized by Oracle Corporation.
- **MongoDB Associate Database Administrator** – Certified in core database management, backup, performance tuning, and security. Hands-on expertise in administering MongoDB deployments in production.

Projects

EcoShield – Real-Time Environmental Monitoring System   2024

- Designed and developed a real-time monitoring system using Arduino sensors to collect and analyze air quality, temperature, and humidity data.
- Automated data processing with Embedded C, enabling efficient tracking of environmental changes and supporting sustainability initiatives.
- Tools Used: Embedded C, Arduino, Sensors, Data Processing & Automation

MedAI – AI-Powered Healthcare System   2024

- Built an AI-powered healthcare application that predicts diseases based on patient symptoms using deep learning models.
- Implemented a multi-layer perceptron (MLP) with TensorFlow and Keras, improving diagnostics through feature engineering and optimized training.
- Developed an interactive web interface using Flask and React.js for real-time disease prediction and insights.
- Tools Used: Neural Networks (MLP, CNN), TensorFlow, Keras, Data Preprocessing, Flask, React.js

DevTrack – Project Management Tool   2025

- Developed a software engineering project management tool with real-time updates, Kanban boards, and automated reporting.
- Enhanced collaboration by implementing secure authentication, role management, and seamless team communication through REST APIs.
- Tools Used: MERN Stack (MongoDB, Express.js, React, Node.js), REST APIs, Redux, State Management, Authentication & Access Control