ANIRUDH MADHIGIRI GOPINATH

Software Engineer

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📅 April 27, 1993

SKILLS

- HTML
- CSS
- Javascript
- Python
- React
- Node.js
- Express.js
- Jest
- RTL
- MySQL
- MongoDB
- AWS
- Azure
- Docker

COURSES

- Microsoft Azure Data Scientist Associate (DP1OO) - https://www.coursera.org/account/accomplishments/specialization/certificate/P33GUAKA4PPP

- Visual Analytics with Tableau Coursera - https://www.coursera.org/account/accomplishments/certificate/TYZVUQ46H5K3

EMPLOYMENT

Data Scientist   2023 - Present
Salzburg Research Forschungsgesellschaft m.b.H, Salzburg

- Creating an optimal Edge Cloud service placement model considering performance, sustainability and costs
- Extending MINER tool to analyze and visualize performance, sustainability and energy consumption metrics
- Implementing solutions for the "Steel Production" use case, ensuring dependable sensor integration and validating service placement in a distributed AI architecture

Junior Software Engineer   2021 - 2022
Paderborn University, Paderborn

- Created efficient SQL queries for MySQL databases to extract pertinent data, ensuring optimized performance during retrieval
- Applied preprocessing and data cleaning techniques to validate, transform and ensure the accuracy and consistency of the queried data
- Utilized interpolation to detect anomalies, enhancing data quality
- Developed user-friendly interactive visualizations with Google Charts and ReactJS to present data insights effectively
- Efficiently integrated file handling, reducing processing time for millions of data points
- Collaborated with cross-functional teams for seamless data integration, ensuring data integrity throughout development

Software Engineer   2017 - 2018
Nextgen Healthcare, India

- Being a core member of UI team involved myself in reviewingPR's and handling deployments
- Designed, developed and tested UI for multiple verticals like EHR, Patients monitoring and Physicians dashboard
- Deployed cost-effective, fault-tolerant, highly available apps on AWS. Used Microservice architecture for Patent records, Authentication and appointments
- Implemented automated testing frameworks, such as unit tests and integration tests, to ensure the quality and stability of the application and its components
- Actively participated in code reviews and adhered to coding best practices, promoting maintainable and scalable codebase

LANGUAGES

English

German

PROJECTS

1. Dynamic Button Animations
- Discover 12+ captivating button animations using HTML, CSS and JavaScript for impressive visual effects
- Elevate user engagement with interactive elements and clear calls to action
- Comprehensive documentation and step-by-step instructions for easy integration by developers of all skill levels

2. Real-Time Chat Room
- Created a dynamic chat room app using Node.js, Express.js and WebSockets for real-time communication between backend and frontend
- Users enjoy instant messaging in a responsive and interactive chat environment
- Utilized Node.js and React.js for a scalable and user-friendly interface, enabling seamless collaboration among multiple users

3. Master Thesis: Analysis of Job Tracesin HPC Systems (Pc2)
- Utilized data-driven approach to analyze Noctua cluster job logs, gauging resource usage(wait time, run time and resident set size)
- Developed ML classification models with 70% accuracy to identify failed or canceled jobs. Achieved 93% R2 score with ML regression models for predicting required resources (memory, CPU and time)
- Utilized unsupervised ML techniques like K-Means and HDBSCAN to identify similar job types
- Exploring neural networks and sequential models for enhanced predictive analysis

4. Digital Toolsfor Strategic ProductPlanning (Fraunhofer)
- Worked on diverse datasets, extracting insights, and innovatively visualizing on Jupyter Notebook
- Achieved 90% accurate predictions for COVID cases using ML regression and time series analysis with ARIMA and SARIMAX models

EDUCATION

Master of Science   2022
Paderborn University

Bachelor of Engineering   2016
National Institute of Engineering