Sree Krishna Suresh

San Jose, CA | suresh.sr@northeastern.edu | LinkedIn | GitHub | Portfolio

EXPERIENCE

The Nirvana Labs San Francisco, CA
Data Scientist Feb 2024 - Present

A startup that offers an advanced search engine to discover professionals using simple natural language (Open-Source)

- Developed machine learning models for resume data analysis (causal inference, temporal/spatial clustering, sentiment)
- Reduced business decision-making time by 25% by developing an Genrative AI based application with Streamlit and FastAPI. Created QuickSight dashboards for over 15 diffrent modules such as university, skills etc

Lightforce Orthodontics Boston, MA
Data Science Intern Jan 2023 - Jul 2023

- Led the development of an innovative solution for plane generation in three dimension (3D) with 98% accuracy, using PointNet++ model on AWS SageMaker (PyTorch), **reducing orthodontics bracket placement costs by $50,000**
- Built an automated data pipeline on AWS Airflow to process 5TB+ challenging point cloud data, and store in S3
- Optimized data cleaning time by 30% by implementing data sampling techniques and handling noise and missing data
- Reduced deployment time by 20% by optimizing CI/CD workflows with Terraform, TeamCity, enhancing team productivity
- Researched and evaluated the effectiveness of 7 different loss functions and fine tuned 3D object segmentation ML models

Wipro Remote, India
Senior Software Engineer (Data Engineer) Jan 2021 - Aug 2021

- Increased application performance by 60% by building an optimized ETL pipeline connecting PostgreSQL and ElasticsDB
- **Delivered cost savings of $200,000** by implementing a scalable data retrieval architecture between client and server
- Colabrated with cross functional teams and authored SQL, Logstash scripts and designed a new data model with GraphQL

Software Engineer (Full-Stack Developer) May 2018 - Dec 2020

- Worked on the development and testing of Nokia's optical network planning web application, using Angular and Spring
- Delivered the highest number of features (25+) among an agile team of 52 employees, maintaining high coding standards

EDUCATION

Master of Science in Data Science, Northeastern University Sep 2021 - Dec 2023
Bachelor of Technology in Mechanical Engineering, SASTRA University Jun 2014 - May 2018

PROJECTS

Agriculture Policy Recommendation System (Link) Nov 2023 - Mar 2024

Generated future policy by fine-tuning LLMs through OpenAI API. Integrated multi modal predictions from Vision Transformers (multi-spectral satellite images), LSTMs (supply-demand trends), and BERT models (textual news) using LangChain

Crop Production Analysis and Yield Prediction (Link) Sep 2022 - Dec 2022

Performed time series forecasting of crop yields using remote sensing data. Reviewed 8 research papers and developed LSTM model using PyTorch. Performed EDA and generated visualizations with Tableau for 4M+ data points

Diabetic Retinopathy Severity Stage Classification (Link) Oct 2021 - Dec 2021

Built custom CNN-RNN model from stratch and classified 5000+ images with 80% accuracy. Enhanced model performance by data augmentation (Gaussian blur), dimensionality reduction (t-SNE), and hyperparameter tuning (Bayesian optimization)

ACHIEVEMENTS

- Runner up at Spotify's music gener classification Hackathon (ensemble model of XGBoost, LightGBM, CatBoost) (2023)
- Recognized with the Panache Award for outstanding performance and high learning ability at Wipro (2021)
- Published EEG Controlled Bionic Arm (AI enhanced prosthetic, controlled using brain waves), GUCON, IEEE (2019), (Link)

SKILLS

Programming & DB : Python, R, Java, JavaScript, SQL, NoSQL, C++, HTML5, CSS
Data Science & ML : PyTorch, TensorFlow, NumPy, Pandas, Scikit-Learn, NLTK, Matplotlib, Hugging Face, A/B Testing
Developer Tools : AWS (Airflow, SageMaker), Tableau, PySpark, Jenkins, Jira, Git