Tanish Patwa

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EDUCATION

Georgia Institute of Technology, Atlanta, Georgia   Aug 2024 - May 2026
Master of Science in Computational Science and Engineering
Relevant Coursework: Computational Data Analysis, Data Visual Analytics, Modeling and Simulation, Large Language Models
Dwarkadas J Sanghvi College of Engineering, Mumbai, Maharashtra, India   Jan 2020 - Jun 2024
Bachelor of Technology in Computer Science with Honors in Intelligent Computing.   GPA: 9.35/10
Relevant Coursework: Data Mining and Warehouse, Bayesian Computing, Advanced Databases, DSA, ML, DL, NLP, AI

EXPERIENCE

AI/ ML Intern at Infiheal, Maharashtra, India   Oct 2023 - Jan 2024
- Engineered a **data workflow** processing information from **10+ sources**, streamlining and preprocessing while reducing errors by **20%**. Integrated multiple AI APIs (OpenAI, VertexAI, Anthropic Claude), boosting conversational AI effectiveness by **17%**.
- **Presented innovative research** on deploying conversational AI chatbots for mental health at **'Two Days International Research Conference on the Role of Artificial Intelligence in Management Research**' organized by Zimbabwe University.
- Assisted in deployment of the website using **Amazon EC2 instance.**

Freelancer at White Turtle, Maharashtra, India   Jul 2023 - Dec 2023
- Utilized **statistical techniques** and **data analysis** to evaluate player statistics and identify the most effective lineup configurations. Developed a **specialized loss function** tailored to improve accuracy and performance by **19%**.
- Conducted a **comparative analysis** of 10 leading video editing software tools to evaluate their features, performance, and integration capabilities. Implemented AI solutions for scene detection, automated tagging, and video enhancement **by 10%**.

Full Stack Intern at Threco Pvt Ltd, Maharashtra, India   Jun 2021 - Sept 2021
- Created an **ETL pipeline** to streamline tasks, reducing manual intervention and enhancing data quality. Developed dashboards and new functionalities, **boosting system capabilities by 25% using matplotlib**.
- Spearheaded daily stand-ups, sprint planning, and backlog prioritization, ensuring punctual delivery through **agile methodologies**. **Automated system report generation** via data analysis, contributing to an **11%** increase in profits.

PROGRAMMING PROJECTS

Personalized Learning Pathway System   Jan 2024 - May 2024
- Consolidated educational data from various learning platforms, **extracting data of multiple formats** . Utilized advanced embedding techniques to unify data in a cohesive space. Used **RAG** and AI to give relevant and contextual answers.
- Developed **interactive learning dashboards using plotly** to visualize student progress, recommended courses, and performance analytics, enhancing the personalized learning experience.

Stock Market and Uncertainty Prediction [Accepted]   Oct 2023 - Dec 2023
- Attained precise stock price forecasts with an **RMSE of 7.8 over an 8-year** evaluation period. Employed multivariate time series models to examine financial indicators, enhancing performance by **20%** through Transformer architectures.
- Developed customized **Bayesian neural networks using TensorFlow Probability** to produce probabilistic projections. Incorporated **uncertainty modeling** using **variational inference** methodologies to reflect **market fluctuations** in predictions.

Emotion Dectection from Social Media Posts   May 2022 - Jun2022
- Deployed advanced models such as **LSTM and BERT with the help of tensorflow** for **sentiment analysis**. Achieved a classification accuracy of **85%**, distinguishing emotions including joy, anger, sadness, and surprise.
- Utilized word embeddings like **Word2Vec** to transform text data into numerical features. Implemented advanced NLP preprocessing to handle social media data and Create a **time series visualization** of emotions changes using **d3.js**.

PROGRAMMING SKILLS

Proficient in *Java, Python, JavaScript, SQL*; Familiar with *C, HTML, CSS, React, AWS, Google Cloud, PostgreSQL, R, Julia , AWS*

PUBLICATIONS AND CERTIFICATIONS

- **GCP Public Profile** - *[Profile]*
- **Smart Phone Based Pothole Detection** - [*Published*]
- **DR-SASV: A Deep and Reliable Spoof-Aware Speech Verification System** - [Published]

No Visa sponsorship required