

AKSHAY PARATE

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EDUCATION

Stevens Institute of Technology

Master's, Data Science

August 2023 - December 2024

GPA: 3.66

- Relevant coursework: Applied Machine Learning, Data Analysis using Statistical Methods, Optimization in Data Science, NLP.

IIIT Bangalore

Certification, Advanced Programme in Blockchain Technology

December 2021 - August 2022

GPA: 3.6

- Certificate link: [Link to certificate](#)

K.J. Somaiya College of Engineering

Bachelor's, Electronics and Telecommunication Engineering

May 2018 - May 2021

GPA: 3

SKILLS

- Programming Languages/Frameworks:** Python, R, Java, JavaScript, SQL, AngularJs, Flask, PySpark, Jupyter Lab, Pycharm.
- Machine Learning libraries:** Pandas, NumPy, Matplotlib, scikit-learn, PyTorch, TensorFlow, Keras, NLTK, Spark, Hadoop.
- Machine Learning Algorithms:** Linear Regression, Logistic Regression, Decision Trees, SVM, Ensemble Trees, Clustering.
- Statistical Analysis:** Hypothesis Testing, ANOVA, Regression Analysis, Time Series Analysis, Data Integration and Analytics.
- Neural Network:** Recurrent Neural Network, LSTM, Attention, Transformer, Convolutional Neural Networks, LLM.
- Data Processing / Visualization Tools:** SAS, Power BI, Tableau, Python, Excel, Exploratory Data Analysis.
- Cloud Platforms / DevOps:** AWS, Alibaba, Git, Jenkins, Kubernetes, Postman, Snowflake.
- Finance:** Financial Risk Management, Fixed Income, Bonds, Hedge Funds, Derivatives.

CERTIFICATIONS

Introduction and Intermediate R for Finance, Data camp.

Java Full Stack Development Course, Coders Technology, Mumbai.

PROFESSIONAL EXPERIENCE

LTIMindtree

Senior Consultant

Riyadh Saudi Arabia

June 2021 - August 2023

- Implemented DevOps (CI/CD) automation to enhance the project's ability to deliver applications and services at high velocity.
- Utilized Python for data analysis on production server traffic, contributing to enhanced server responsiveness by 20%.
- Developed a machine learning algorithm for a decision system that dynamically scaled servers based on real-time loads.
- Research and develop novel statistical approaches and machine learning models for real-time server load monitoring, enabling dynamic scaling and optimizing resource utilization by 15%.
- Perform full data modelling and algorithm development cycle: training, deploying, and maintaining services.
- Implemented Linux and Ansible scripts for health checks of non-production servers.
- Automated analyses and authoring pipelines via SQL and python based ETL framework.
- Designed and developed reports in python to meet business needs.

K.J. Somaiya College of Engineering

Python IOT Intern

Mumbai, Maharashtra, India

September 2019 - January 2020

- Developed Python automation scripts for smart irrigation, leading to increased efficiency by 12% and reduced labor costs.

PROJECTS & OUTSIDE EXPERIENCE

Personal Assistant AI

New Jersey, USA

- Utilized and fine-tuned the BART pretrained model for specific applications, enhancing its performance for targeted tasks.
- Improved model accuracy by implementing retrieval-augmentation and factual corrections, ensuring the generation of reliable and up-to-date information.
- Developed a feedback loop to learn from errors and applied model calibration techniques to minimize hallucinations, ensuring more accurate and trustworthy outputs.
- Successfully integrated the enhanced model with existing deep learning models, including financial sentiment analysis and trading strategies, to create a cohesive and robust AI system.
- [Link to project](#)

RNN-Attention French to English Translation from scratch (LLM)

New Jersey, USA

- Utilized Recurrent Neural Networks architectures to capture sequential dependencies in input English sentences and generate corresponding hidden representations.
- Implemented attention mechanisms to dynamically focus on relevant parts of the input sentence during the translation process, enhancing the model's ability to align source and target language semantics.
- Integrated transformer architecture to leverage parallel processing and capture long-range dependencies more effectively, resulting in improved translation accuracy and efficiency.
- [Link to project](#)