AKSHAY PARATE

(551) 331-3971 | aparate@stevens.edu | linkedin.com/in/akshay-parate-b49169171 | github.com/akshayparate123

EDUCATION

Stevens Institute of Technology **August 2023 - May 2025**
Master's, Data Science *GPA: 3.55*
- Relevant coursework: Applied Machine Learning, Data Analysis using Statistical Methods, NLP, DL, Big Data Technologies.

K.J. Somaiya College of Engineering **May 2018 - May 2021**
Bachelor's, Electronics and Telecommunication Engineering *GPA: 3*

SKILLS

- **Programming Languages/Frameworks:** Python, R, Java, JavaScript, MySQL, MongoDB, Flask, PySpark.
- **Machine Learning libraries:** Pandas, NumPy, Matplotlib, scikit-learn, PyTorch, TensorFlow, NLTK.
- **Machine Learning:** 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:** Power BI, Tableau, Python, Excel, Exploratory Data Analysis.
- **Cloud Technologies / DevOps:** AWS, Git, Jenkins, Kubernetes, Postman, Spark, Hadoop, Databricks.
- **Finance:** Financial Risk Management, Fixed Income, Bonds, Hedge Funds, Derivatives.

CERTIFICATIONS

- Advanced Programme in Blockchain Technology, IIIT Bangalore.
- Introduction and Intermediate R for Finance, DataCamp.
- Java Full Stack Development Course, Coders Technology, Mumbai.

PROFESSIONAL EXPERIENCE

LTIMindtree **Riyadh Saudi Arabia**
Senior Consultant *June 2021 - August 2023*
- Designed and executed a CI/CD pipeline that facilitated the automated testing of 100+ applications, this initiative reduced manual testing efforts by 20 hours weekly, allowing for faster feedback and deployment cycles.
- Utilized Python for data analysis on production server traffic, contributing to enhanced server responsiveness by 20%.
- Developed insights from data analysis which identified critical patterns necessary for effective load distribution among servers findings directly addressed three major causes leading to service interruptions previously experienced.
- Researched and developed novel statistical approaches and machine learning models for real-time server load monitoring, enabling dynamic scaling and optimizing resource utilization by 15%.
- Implemented Linux and Ansible scripts for health checks of non-production servers.
- Collaborated with cross-functional teams including Product, Engineering, Research, Design, Sales, and Marketing to turn business questions into data problems.

K.J. Somaiya College of Engineering **Mumbai, Maharashtra, India**
Python IOT Intern *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 *Link to project* **New Jersey, USA**
- Designed and developed a voice-controlled GPT-based generative AI from the ground up for applications including question answering, summarization of text and code, paraphrasing, and profile creation.
- Enhanced model accuracy by 40% through retrieval-augmented techniques using internet data mining and incorporated feedback learning for factual corrections, ensuring reliable and up-to-date information generation.
- Developed a screen reading algorithm using OCR to summarize on-screen content.
- Employed the model to paraphrase and generate tailored resumes and cover letters for job applications, with data sourced via Selenium from Google Jobs.
- Developed an advanced Retrieval-Augmented Generation (RAG) pipeline utilizing Chroma vector database, implementing contextual similarity methods and query rewriting techniques to enhance result accuracy.

AI-Trader: Real-Time Automated Portfolio Building and Algorithmic Trading *Link to project* **New Jersey, USA**
- Spearheaded the full development of an investment tracking platform covering cryptocurrencies, stock markets, and mutual funds.
- Developed and fine-tuned a BERT model with a classification layer for sentiment analysis of financial news sourced from the Google News API, achieving 90% accuracy.
- Developed and integrated real-time scalping and short-term algorithmic trading strategies into the platform, along with the Piotroski strategy model for stock analysis, resulting in a 120% increase in profits.