# AKSHAY PARATE

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## **EDUCATION**

#### **Stevens Institute of Technology**

August 2023 - December 2024

Master's, Data Science

GPA: 3.55

• Relevant coursework: Applied Machine Learning, Data Analysis using Statistical Methods, Natural Language Processing.

IIIT Bangalore
Certification, Advanced Programme in Blockchain Technology

Bachelor's, Electronics and Telecommunication Engineering

**December 2021 - August 2022** *GPA: 3.6* 

• Certificate link: *Link to certificate* 

K.J. Somaiva College of Engineering

May 2018 - May 2021

GPA: 3

## **SKILLS**

- Programming Languages/Frameworks: Python, R, Java, JavaScript, SQL, AngularJs, Flask, NodeJs.
- Machine Learning libraries: Pandas, NumPy, Matplotlib, Seaborn, PyTorch, TensorFlow, Keras, NLTK.
- Machine Learning Algorithms: Linear Regression, Logistic Regression, Decision Trees, Random Forest, K-means clustering.
- Statistical Analysis: Hypothesis Testing, ANOVA, Regression Analysis, Time Series Analysis, Data Integration and Analytics, SAP.
- Neural Network: Recurrent Neural Network, LSTM, Attention, Transformer, Convolutional Neural Networks, LLM.
- Visualization Tools: Power BI, Tableau, Python, Advanced Excel.
- Cloud Platforms/DevOps: AWS, Alibaba, Git, Jenkins, Kubernetes, Postman.
- 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 Riyadh Saudi Arabia

Senior Consultant

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.
- Led the development and implementation of a Python script for real-time server load monitoring, enabling dynamic scaling and optimizing resource utilization by 15%.
- Played a vital role in conducting business analysis for the client, contributing to strategic decision-making processes.

#### 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

## Strategic-Fund: Comprehensive Analysis and Portfolio Simulation using Python and Power BI

New Jersey, USA

- Extracted and cleaned a comprehensive dataset of 13,000 mutual funds using Python, ensuring high data quality and consistency.
- Computed mean returns and standard deviation for each fund, and generated 100,000 potential portfolios using Monte Carlo simulation on excel using pivot tables and queries.
- Optimized portfolio selection by maximizing the Sharpe ratio, achieving a portfolio with a Sharpe ratio of 14.
- Developed an interactive Power BI dashboard to visualize portfolio performance, composition, and key metrics.
- Link to project

#### AI-Trader: Real Time Automated Portfolio Building and Algorithmic Trading

New Jersey, USA

- Led the end-to-end development of an investment tracking platform, encompassing crypto, stock markets, and mutual funds.
- Utilized MySQL for database management, ensuring efficient and secure data storage and retrieval.
- Implemented BERT pre-trained model with a classification layer to train on existing financial news for sentiment analysis, achieving 90% accuracy.
- Utilized Google News API to mine the latest financial data and generated daily reports in Power BI with calculated sentiment.
- Implemented the complex financial Piotroski strategy model for stock fundamentals financial analysis using balance sheets, income statements, and cash flow statements
- Link to project