### Aman Savla

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## **EDUCATION**

The University of Chicago

Chicago, IL

### **Master of Science in Financial Mathematics**

**Expected December 2025** 

• Courses: Python, Option Pricing, Probability & Stochastic Processes

Maharashtra Institute of Technology

Pune, India

Bachelor of Technology in Computer Science and Engineering (GPA: 3.87/4)

June 2022

• Courses: Data Structures and Algorithms, Differential Equations, Multivariable Calculus, Probability Theory, Machine Learning, Deep Learning, Natural Language Processing

### **SKILLS**

Computing: Python, C++, AFL, AmiBroker, Jupyter, R, SQL, MS Office

Knowledge: Financial Markets, Algorithmic Trading, Machine Learning, Data Analytics

Trading Products: Options, Futures, Equities

Other: Financial Engineering Specialization, Algorithms Specialization, Financial Markets - Coursera

# **EXPERIENCE**

**Swan Capital** 

Mumbai, India

## **Quantitative Research Analyst**

June 2022 - May 2024

- Led development of quantitative trading strategies for equity derivatives through data-driven research and backtesting in Amibroker and Python
- Optimized strategies for dynamic market conditions, boosting robustness and reducing drawdowns by over 40% while increasing returns by 30%
- Implemented a Black Scholes Model to simulate trades in adverse conditions and to fix data holes
- Conducted Regime Analysis to evaluate strategy profitability across different market conditions

• Developed a tool for business analytics to track all affiliate links and advertising interactions

- Headed a team in developing a framework for integrating alternative data into the research pipeline, creating advanced scripts for data scraping and analysis leveraging parallel processing
- Revamped existing backtest framework with vectorization, boosting processing speed and handling of larger files

# KuKuFM

Bangalore, India

**Software Engineer Intern** 

- August 2021 November 2021
- Created a pipeline to scrape data from creator platforms such as YouTube, Instagram and Facebook and performed data updates in a batched manner to optimize compute and costs, with Python and BigQuery
- Initiated development of a recommendation system utilizing Nonnegative matrix factorization techniques

# **ACADEMIC PROJECTS**

### **Maharashtra Institute of Technology**

Pune, India

# Real Time Motion Recognition for Sports Performance Enhancement

November 2021 - May 2022

- Designed a model with a ResNet-50 backbone and trained it for exercise classification in recorded videos with 92% accuracy
- Implemented and trained an LSTM model for realtime exercise classification and posture evaluation with 74% accuracy using a custom-curated dataset to ensure robust training and validation

#### Stock forecasting and portfolio optimization

May 2021 - July 2021

- Predicted stock prices/trends using various ML algorithms such as ARIMA, SARIMA, LSTM, with RMSE as the evaluation metric and creating a portfolio with these predictions
- Optimizing the portfolio using MCS, MVO and implementing modern portfolio theory

#### **EXTRACURRICULAR**

**Rotaract Club of Pune Pride** 

**Club President** 

Pune, India

July 2020 - June 2021

• Coordinated professional development and community service events with a team of 45+ members. Organized fundraisers during the pandemic, raising over Rs. 80,000 to support the underprivileged

### ADDITIONAL INFORMATION

Interests: Skiing, derivatives trading, poker, powerlifting, badminton