

# RAM RAVI

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## EDUCATION

### Drexel University

Master of Science, Data Science

Current GPA: 4.0/4.0

Philadelphia

(Sep 2023 - June 2025)

### Hong Kong University of Science and Technology (HKUST)

Bachelor of Engineering, Electrical and Electronic Engineering

Dean's List

Hong Kong

(2010-2014)

(Spring 2013, 2014)

## RELEVANT PROJECTS

- **Bookshelf Scanner:** Building a computer vision model to recognize book spines and recommend books based on Goodreads/Hardcover profiles
- **Heart Disease Prediction and Severity:** Trained and evaluated machine learning models (XGBoost, Decision Tree, SVC, Logistic Regression, Naive Bayes) to predict heart disease presence and severity
- **AAPL Stock Price Prediction:** Developed and fine-tuned an XGBoost model to predict AAPL stock prices
- **Reddit Stock Mention Trend Analysis:** Collected stock mentions from Reddit and integrated market data (daily close price, put-call ratio) to construct a dataset for trend analysis

## WORK EXPERIENCE

### Exelon (Baltimore Gas and Electric)

Baltimore (Remote)

#### Advanced Analysis and Modelling (co-op)

(July 2024 - Jan 2025)

- Performed data analysis for solar and battery storage projects, evaluating grid integration and performance metrics
- Designed and developed tools in python to optimize capacity planning, perform voltage analysis and enhance forecasting accuracy for Distributed Energy Resources (DER)

### Athena Capital Research

Hong Kong

#### Senior Trade-Operations Engineer

(Sep 2018 - Sep 2023)

- Performed post-trade analysis using Python and statistical methods to identify trade inefficiencies
- Analysed market data to identify correlations in price returns across different futures exchanges
- Managed technology for trade-operations to support entire hedge fund's high-frequency trading strategies
- Developed and maintained real-time monitoring tools using Python to detect and flag trading-system errors

### Morgan Stanley

Hong Kong

#### Technology Associate, Production Management

(Dec 2014 - Apr 2018)

- Developed scripts for process monitoring of specific "business as usual" support tasks using Unix, Python
- Led tech support for Institutional Equity Derivatives and Risk in Asia for Sales and Trading
- Collaborated with global IT to enhance market systems, including migrating Hong Kong's risk account database to Sybase ASE 16.0 and conducting host migration for the risk account systems

### Morgan Stanley

New York

#### Technology Analyst Program (TAP)

(Aug 2014 - Dec 2014)

- Designed a framework for continuous system monitoring; presented findings to senior management

## SKILLS AND PUBLICATIONS

Python (Scikit-Learn, NumPy, Pandas), SQL, Pyspark, Java, Unix, MATLAB, R, C#,C

### 2022 IEEE 9th International Conference on Data Science and Advanced Analytics (DSAA)

- Y. Zhao, R. Ravi et al, "PATE: Property, Amenities, Traffic and Emotions Coming Together for Real Estate Price Prediction" - Real estate price prediction using XGBoost and Linear Regression methods
- Y. Zhao, S. Shi, R. Ravi et al, "H4M: Heterogeneous, Multi-source, Multi-modal, Multi-view and Multi-distributional Dataset for Socioeconomic Analytics in the Case of Beijing" - Constructed a dataset containing real estate features

## PERSONAL

CFA (Level 1), PADI Advanced Open Water Diver, Drexel Finance and Investment Group (DFIG), HKUST International Students Soccer Team (2010-2012), Drums, Cricket