# **Prathmesh Savale**

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## **Education**

## The University of Texas at Austin

May 2023

Master of Science, Business Analytics, 3.7 GPA

Coursework: Advanced Machine Learning, Optimization, Deep learning, Unstructured Data Analytics

University of Pune May 2015

Bachelor of Engineering, Computer Engineering, First Class with Distinction, 3.8 GPA

Coursework: Database Management Systems, Data Structures and Algorithms, Object Oriented Programming

## **Experience**

### Walmart Global Tech - Senior Data Scientist, Austin, TX, US

October 2023-Present

- Led the development of a sales forecasting framework at Sam's Club AI Labs for Merch Finance, improving financial
  and merchandising strategies with precise sales value and unit analysis
- Designed a constraint based causal discovery framework for generating what-if scenario simulations, enhancing forecasting and strategic planning by identifying key causal factors affecting sales and units
- Created a model-agnostic "Explainer" tool to assess the impact of promotions, pricing, holidays, macroeconomic factors, and inventory on sales, integrating causality to enhance analysis and optimize decision-making

## **HP Inc.**- Data Scientist, Austin, TX, US

May 2023-October 2023

- Collaborated with marketing VP to devise customer cohorts using unsupervised learning to target top 5% users which expanded HP Instant Ink and Smart Advance subscriptions by 13%, generating revenue of \$400K over 3 months
- Developed a LLM based chatbot to complement KPI dashboard and provide easy access to CXO level insights

#### **US Med-Equip** - Graduate Capstone, Austin, TX, US

January 2023-May 2023

Achieved 98% accuracy forecasting medical equipment rentals using Vector Autoregression and PySpark, saving \$2M in lost rentals annually by decreasing turndowns and increasing availability across different regions in the US

#### HP Inc.- Data Scientist, Bangalore, India

January 2021-June 2022

- Used Bayesian A/B testing on HP Smart App coach marks and UI to increase retention rate by 8%
- Mentored 8 team members on LookML development and partnered with 5 cross-functional teams to deliver HP Smart
   App usage reports to the global head of HP Print Software and Future Product Marketing

#### Kiewit Corporation - Data Science Consultant, Bangalore, India

October 2018-Jan 2021

- Enhanced throughput of Kiewit's Buckskin Mine by using LSTM networks to preemptively anticipate breakdown of the coal-carrying Caterpillar haul trucks and minimized downtime of repairs by 30%, saving \$1.8M annually
- Used SHAP values to identify features that contribute to the maximum number of breakdowns
- Developed a text classification framework for Kiewit finance using Word2Vec to tag commodity procurement invoices with SAP Ariba taxonomy, helping verify expenditure and reduce fraudulent supplier claims by 20%

#### Mu Sigma Inc.- Decision Scientist, Bangalore, India

September 2015-October 2018

Tesco (UK) - Bus One Forecast

November 2016–October 2018

- Devised a time series-based ensemble to forecast sales across multiple product categories with an accuracy of 98%
- Included adjustment for external regressors like holidays and used forecast scaling for store closures which helped improve the overall company level forecast accuracy by 5.6%, reducing value error of \$4M annually

Apple (US) - Repair Center Operations and Analytics

September 2015-November 2016

- Mined data across multiple sources to find the root cause of dead on arrivals and loopers (device failures)
- Created a tree based ensemble to predict propensity of device failures, leading to a 3% reduction in failure rate
- Proposed cascading classifiers to help predict the rarer class and minimize false positives by 15% during prediction

## Skills

**Programming:** Python, PySpark, R, SQL, LookML, Bash

Computational programming: numpy, pandas, tidy, Scikit-learn, Statsmodels, Keras, Gurobi, Langchain Statistical Analysis: Regression, Classification, Bagging, Boosting, Ensemble, Time Series Analysis, Hypothesis - testing, Neural Networks, Unsupervised Learning, A/B testing, Forecasting, Generative Models, Optimization Tools and deployment: Docker, Elastic Search, DataBricks, Git, Looker, Airflow, AWS (EMR, EC2), Jenkins, JIRA