

# Prathmesh Savale

<https://praths007.github.io/>  
prathmesh.savale@gmail.com | +91 8087744932

Data Science aficionado with hands-on experience in predictive modeling and insight generation using applied statistics, machine learning, and data mining. Adept in using big data tools for building data pipelines. Experienced in open source contribution.

## SKILLS

### PROGRAMMING

Python and PySpark  
C and C++  
R  
SQL and HiveQL  
Bash

### MACHINE LEARNING

Regression  
Decision Tree and Ensembles  
Support Vector Machines  
Cluster Analysis  
Time Series Analysis  
Neural Networks  
Reinforcement Learning

### TOOLS

Teradata  
Spark and Hadoop  
Git and Github  
Latex  
Jenkins  
Jira

## EDUCATION

### PUNE UNIVERSITY

#### BACHELORS IN COMPUTER ENGINEERING

July 2015  
First Class with Distinction

## CERTIFICATIONS

Coursera:// **Machine Learning**  
Mu Sigma:// **Decision Scientist**  
Udemy:// **Hands-On Data Science**

## LINKS

Github:// **praths007**  
LinkedIn:// **prathmeshsavale**

## EXPERIENCE

### KIEWIT CORPORATION | Data Analyst | Oct 2018 - Present

- **Predicting unplanned breakdown of haul trucks - Predictive Maintenance**
  - Built a classification framework using LSTM networks to predict unplanned breakdown of Caterpillar haul trucks at coal mines.
  - This translated to save additional cost of repairs for unplanned breakdowns and increase throughput of the mining facility.
- **Forecasting gasoline and electricity consumption for private vehicles**
  - Estimated depreciation of gasoline consumption and subsequent increase of electricity consumption due to the introduction of electric vehicles across all states in the US, using ARIMA and random walk models.
  - Accurate estimates of gasoline and electricity consumption helped decision-makers find the appropriate value of tax to be collected per gallon of gasoline and kilo-watt hour electricity across all states.
- **Optimizing the fleet size of vehicles at construction sites**
  - Built a system that uses regression and linear reward inaction to determine the optimum fleet size of vehicles used at construction sites.
  - This translated to a reduction in vehicle idle time and maintenance costs.

### MU SIGMA INC. | Decision Scientist | Sep 2015 - Oct 2018

- **Building sales forecasting framework | Client - UK's largest retailer**
  - Built a forecasting framework using ARIMA with seasonal adjustment which translated to a 5.6% increase in company level forecast accuracy.
  - The framework is responsible for producing forecasts at multiple levels (company, store, product level etc.) and is used by the commercial and finance teams for inventory, budgeting and payroll management.
  - Parallelized model building, scoring, and forecasting for ~2500 stores and ~3600 products using PySpark.
- **Reducing device failure rates | Client - Fortune 3 technology giant**
  - Created a boosted trees ensemble to predict electronic device failures leading to a 3% reduction (9% to 6%) in failure rate.
  - Reduction in failure rate translates to cost reduction of ~1.8 million USD annually in logistics and inventory management.
  - Implemented cascading classifiers to decrease collateral damage while predicting device failures.
  - Completely automated and deployed the analytical solution using bash and Jenkins saving ~40 man-hours each week.

### PERSISTENT SYSTEMS | Engineering Intern | Jun 2014 - May 2015

- **Developing CUDA based image processing application**
  - Developed an application using CUDA C++ to execute a content-aware image resizing algorithm called seam carving on GPUs.
  - Achieved ~7.5X acceleration in execution time using GPUs due to the high degree of parallelism of CUDA architecture.

## AWARDS

2017	Top 10% of 2500	Spot Award, Mu Sigma
2016	Top 3% of 2500	Impact Award, Mu Sigma
2015	3 <sup>rd</sup> /180	Undergraduate Engineering Class Rank