# Sarthak Kothari

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#### **EDUCATION**

## Northeastern University, Boston, MA

Sept 2017 - Present

College of Computer and Information Science

Expected Graduation - Dec 2019

Candidate of Master of Science in Data Science.

Relevant Courses: Supervised Machine Learning, Unsupervised Machine Learning and Data Mining, Large-Scale Parallel Data Processing, Introduction to Data Management and Processing, Algorithms, Information Retrieval.

## K. J. Somaiya College of Engineering, Mumbai, India

Jun 2016

Secured a Bachelor of Engineering in Computer Science with Distinction

#### **TECHNICAL KNOWLEDGE**

**Development and Statistical Programming Languages** 

: Python, R, Java, Matlab, C, etc.

**Machine Learning Skills** 

: Linear & Logistic regression, Clustering, PCA, etc.

**Database tools & technologies** 

: Neo4j, MongoDB, Spark, Hadoop, SQL Server, MySQL, Postgres, Oracle : Tableau, PowerBI, SSIS, SSRS, Telerik, Excel, etc.

Data Mining, ETL and Visualization Tools
Python Packages & API's

: Numpy, Pandas, Scikit, SciPy, Tensorflow, BeautifulSoup etc.

Tools and frameworks

: Jupyter Notebook, RStudio, Eclipse, Git.

## **WORK EXPERIENCE**

## Staples Inc., Framingham, MA

Jan 2019 - Present

Data Science Intern – Operations.

- Developing a knowledge base of customer complains to identify key factors affecting delivery using NLP techniques in Python in order to improve customer satisfaction.
- Visualizing the delivery footprint for Staples operations to recognize key areas of interest using Python and Bokeh.

## Fidelis Cybersecurity, Bethesda, MD

Jul 2018 - Aug 2018

Data Science Intern

- Migrated millions of records to Neo4j, a graph database, from MongoDB and Spark using Python in order to increase efficiency and data retrieval time for complex queries by 40%.
- Executed clustering analysis on the malware alert data harnessing the intelligence obtained by analyzing relationships between nodes in the graph database to explain how different malware files are associated with each other using Python.

#### Student Housing Services, Northeastern University, Boston, MA

Feb 2018 – Jun 2018

Graduate Assistant - Database and Operations

- Generated insights for the housing services with the help of SQL to understand the demographics of on-campus student housing and prepare for house selection for upcoming semester by taking advantage of those insights.
- Visualized descriptive reports on Telerik reflecting the current housing trends for students living in university housing.

## Hansa Cequity, Mumbai, India

Aug 2016 – Jun 2017

Associate Analyst – Technology Servicing

- Modeled a logistic regression for lead scoring which would rate a lead's likelihood of becoming a customer for a client with accuracy of 90%.
- Developed a completely automated descriptive dashboards in SSRS enabling clients to evaluate product and campaign performance and boosting sales by 15%.
- Restructured and reprogrammed SSIS data integration pipelines to efficiently ingest 100k+ of records from various sources into the system on daily basis.

# **ACADEMIC PROJECTS**

# Predicting Student's Portuguese Grade, Northeastern University, Boston, MA

Oct 2018 – Dec 2018

- Predicting student's final grade for Portuguese language course using demographical, socio-cultural and academic features.
- Building a complex-robust model which first predicts the midterm performance which then becomes a feature to predict the final grade using Python.

## Twitter Follower 2-Hop Neighbors, Northeastern University, Boston, MA

Sept 2018

- Implemented replicated and reduce side joins in MapReduce as well as Spark to find 2-hop followers for the user.
- Executed the algorithms for 11M+ users in the Twitter Edges dataset using AWS EMR cluster.

# Landscape of Funding in Kickstarter Projects, Northeastern University, Boston, MA

Jan 2018 - Apr 2018

- Performed exploratory data analysis (EDA) on the Kickstarter dataset from Kaggle using R in order to figure out the demographics and KPIs that prove vital in a Kickstarter campaigns success.
- Designed a statistical-model that would predict the likelihood of a Kickstarter campaign being successful.

## Exploring and Modelling on Medical Appointment No-Show Dataset, Northeastern University, Boston, MA

Mar 2018

- Excavated insights on medical appointment data-set to identify patients having high risk of not showing up to an appointment and identified KPIs that are specific to patients who do not show up for an appointment.
- Successfully designed and developed a classification model to predict no-shows in Python using scikit-learn and numpy.