# **Satvik Shetty**

⊠: smshetty@ncsu.edu | **①**: +1 919-771-6547 | **♦**: Raleigh, NC- 27606 | linkedin.com/in/satvikshetty | github.com/satvikshetty04

**ACADEMICS** 

Master of Computer ScienceNorth Carolina State UniversityMay 2018GPA: 3.96Bachelor of Engineering in Computer EngineeringUniversity of Mumbai, IndiaJune 2014First Class w/Distinction

**Key Courses:** Automated Learning & Data Analysis, Design & Analysis of Algorithms, Data Guided Business Intelligence, Advanced Data Structures, Artificial Intelligence, Foundations of Data Science, Introduction to Big Data, Data Intensive Computing, Inferential & Descriptive Statistics, Data Driven Decision Making, Object Oriented Design & Development

## **TECHNICAL SKILLS**

**Languages:** Python, R, Java, SAS, C++, C, HTML, CSS, JavaScript **Databases:** PostgreSQL, MongoDB, Oracle 12c, MySQL, MS SQL

Tools / IDE: PyCharm, Eclipse, Android Studio, RStudio, SAS Studio, Jupyter, Git, Tableau, PowerBI

Frameworks / Platforms: Django, Bootstrap, Apache Spark, Apache Hadoop, AWS

#### **PROJECTS**

# Scalable Search Engine [Python, AWS]

- Built an almost real-time scalable search engine pipeline capable of handling high volume of text/news articles and high velocity of queries. AWS Kinesis, Lambda, S3 and ElasticSearch (indexing) were used for the same
- Integrated a gradient boosted model to automatically classify documents into categories to include contextual information

## Machine Learning Challenge: Predicting AD clicks [Tableau, Python]

- Predicted the probability of an AD being clicked using Extreme Gradient Boosting (XGBoost) and CatBoost Classifiers
- Visualized data using Tableau to understand feature significance and performed the ensembling of models in Python

#### Health Insurance Selector [Python, Django, SQLite]

- Developed a web application in Django to return the best health insurance plans based on limited user inputs
- Designed a modified k-NN approach for plan matching and performed sentiment analysis on web scraped reviews

#### **Multi-label Text Classification** [R, Python]

- Performed semi-supervised classification on The Guardian news data-set into seen and unseen topics
- Employed various Natural Language Processing (NLP) techniques on text data for feature generation
- Analysed the performance of various ML classification algorithms using R's mllib package and Python's scikit package

#### **Truth Maintenance System** [Python]

- Built a rule based truth maintenance system that would update its knowledge base based on a sequence of operations

# Database Application & SimpleDB [Java, Oracle 12c]

- Built a simple Swing (Java) application with Oracle 12c (backend) to track/manage patient health status
- Implemented FIFO buffer replacement policy and Undo-Redo recovery algorithm in the existing SimpleDB server

# Commutator [Android, Java, SQLite]

- Created an Android application based on the concept of dynamic ridesharing by allowing users to arrange an ad-hoc ride
- Developed the user interface on Eclipse and managed database connectivity through SQLite and Parse for cloud storage

WORK EXPERIENCE 2 YEARS

## NC State - CIPM, Raleigh, NC

Oct '17 - Current

Programming Intern

- Developed a web application using Django to assist the USDA in performing the spatiotemporal risk analysis of Fruit Flies

# EdgeVerve Systems Limited, Pune, India

Aug '15 - Jul '16

Product Integration Engineer / Business Intelligence Analyst

- Analyzed & processed data and generated reports to help visualize, strategize, and understand the data via Pentaho
- Optimized the target data extraction query in PostgreSQL by 90% brought down the run time from 3 hours to 10 mins
- Part of Android development team to create an application for automatic offline data retrieval component

## Infosys Limited, Pune, India

Jun '14 – Jul '15

Systems Engineer / Data Analyst

- Performed data analysis & wrote stored procedures to ensure correctness and uniformity despite differences in ERP systems
- Developed and maintained a Java based online retail store application called 'JCart', as part of the training in core Java

# **ACHIEVEMENTS**

- Ranked 9th among 5567 in the HackerEarth Machine Learning Challenge in predicting the probability of AD clicks
- Among the top 5% in the Growing Instability Challenge (Multi-Label Text Classification) on datasciencechallenge.org