**MIHIR SAWANT**

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**Education**

**Northeastern University**, **Boston, MA, United States** **May 2020**

*Master of Science in Information Systems*

* Relevant Courses: Designing Advanced Data Architectures for Business Intelligence, Data Science Engineering Methods and Tools, Data Management and Database Design, Big Data Architecture and Governance, Network Structures and Cloud Computing

**Mumbai University, Mumbai, MH, India**    **Jun 2017**

*Bachelor of Engineering in Electronics Engineering*

* Relevant Courses: Structured Programming Approach, Object Oriented Programming

**Technical Skills**

**Programming languages:** Python, SQL, Java, HTML, CSS, C++

**Databases:** MySQL, MongoDB, MS SQL, Oracle SQL Developer, SQL Server, PostgreSQL, CouchDB

**Machine Learning:** Classification, Regression, Clustering, Decision Trees, Random Forests, SVM

**Tools:** Talend, Alteryx, Tableau, PowerBI, Azure SQL, Google BigQuery, Jupyter Notebook, Github, R Studio

**AWS:** EC2, RDS, EBS, Load Balancing, CloudWatch, CodeDeploy, Lambda, CircleCI, S3, Terraform

**Python Libraries:** Keras, TensorFlow, NumPy, Pandas, matplotlib, Scikit-learn, Seaborn

**Certification:** AWS Certified Cloud Practitioner, Tableau Desktop Specialist, Tableau Analyst, Google Analytics

**Work Experience**

**Intern, Applab Technologies, Mumbai Jul 2017- Sept 2017**

* Developed an application for management system in Java to handle data of 500 + students in MySQL server
* Normalized the data to 3NF to eliminate the redundancy to avoid inter dependencies between possible entities
* Engineered ER diagram to perform forward engineering and implemented functionalities using stored procedures and triggers
* Analyzed data to discover and interpret trends, patterns and relationships and created dashboards in Tableau

**Academic Projects**

***Northeastern University, Boston, MA***

**Retail Data Warehouse Integration & Visualization *(MS SQL, Talend, Alteryx, Power BI, Tableau*) Jan 2020**

* Integrated data from 5 data sources into a data warehouse using ETL processes in Talend and Alteryx
* Implemented SCD type 3 and SCD type 4 for handling slowly changing dimensions in data warehouse
* Achieved 7% process optimization by performing data cleaning and profiling and integrated data into MSSQL data warehouse
* Designed dashboards and analyzed sales parameters like forecast, trend, ranking in Tableau and Power BI

**Infrastructure and Web Application *(Terraform, AWS, MS Azure, PostgresSQL,*** ***Node.js, CircleCI, Github*) Nov 2019**

* Built a networking infrastructure in Terraform for a web application and created IAM users, roles, policies in AWS and MS Azure
* Administered the data in RDS instance in Postgresql , DynamoDB and images in S3 buckets using API calls
* Implemented Continuous Delivery and Integration (CI/CD) using GitHub, CircleCi and Code Deploy

**Movie Recommendation System *(Content and Collaborative filtering, Ensembled Learning, Python)* Apr 2019**

* Chaired a team of three to implement a recommendation system which recommends movies to users based on user inputs
* Optimized hyper-parameters to gauge the effect on Content Based Filtering and Collaborative filtering
* Evaluated Hybrid Models, K-means clustering, LightFM and compared to acquire accuracy of 0.901

**Car Fuel Emissions (*Python3, Anaconda, Tableau)* Feb 2019**

* Exercised Stepwise Regression to eliminate multi-collinearity and operated Ridge Regressions and Regularization methods
* Incorporated H2O automl to obtain the best stacked ensemble model to predict the emissions of CO2 with R2 value of 0.9625
* Analyzed the trends to determine potential emissions caused by different fuel components using Tableau and Power BI which improved the accuracy of forecast by 12%

**Reward Point based Movie Ticket Management System *(MySQL server, Toad Data Modeler*) Dec 2018**

* Engineered a database using MySQL to hold data for movie ticket bookings, normalized data to 3NF
* Developed ER model and implemented stored procedures and triggers to offer 3 reward points to redeem in next transaction
* Administered the database to prevent repetitive booking of one seat and offered selective permissions to users as per user type