www.akhilbattu.com linkedin.com/in/akhil-battu

# **AKHIL BATTU**

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#### **EDUCATION**

UNC Charlotte Charlotte, NC Aug 2018 – May 2020

• Master of Science in Computer Science, GPA: 4.0

Osmania University Hyderbad, India Sep 2014 – May 2018

Bachelor of Engineering in Computer Science, GPA: 3.6

#### SKILLS

- Languages: Python, SQL, Java, C++, C, JavaScript, HTML5, CSS, R.
- Databases and Tools: MySQL, MongoDB, XLMiner, WEKA, Orange, AWS, Tableau, PowerBI, IBM Watson, SAS Miner, Git.
- Cloud Technologies: AWS EC2, S3, RDS, DynamoDb, ELB, CloudWatch, Redshift
- ML Skills: Regression, Decision Tree, Sentiment Analysis, K-Means, K-NN Classifier, Naïve Bayes, TextBlob, NLTK, Tensor-Flow, Keras, Scikit Learn, A/B, ETL, Kafka, Docker, MapReduce, Hive, Spark.
- Certifications: IBM Data Science Certification, KPMG Virtual Internship, Power BI, Tableau 10, Python, Salesforce.

#### **EXPERIENCE**

# **Graduate Teaching Assistant**

# **UNC Charlotte, NC**

Jan 2020 - May 2020

- Analyzed and built Machine Learning models using Python, XLMiner and SAS Tools and assisted in the preparation of new teaching materials, grading assignments according to university standards.
- Taught small groups of students focused on specific parts of coursework.

#### **Data Engineer Intern**

# **Object One Information Systems**

May 2017 - Sep 2017

- Established a Database in the redesign of the Leave Management System and introduced additional functionality such as report creation, leave-transactions using MySQL. Connected the data to the Front-End Application.
- Collect and analyze details on vulnerabilities. Maintained the SQL Server.

### **PROJECTS**

- Kaggle- Titanic Disaster Analysis: Handled Data Wrangling, Exploratory Data Analysis and built a model to predict the survival of passengers. Used Random Forest and tuned the hyper parameters and got a Kaggle score 0.76
- House Pricing Analysis on AirBnB Listings: Built a model to predict the price of Airbnb listings using a very large dataset. Used Multiple and Polynomial Linear Regression, XGBoost, Random Forest Regression and Autoencoder nueral networks to train the data and achieved an accuracy of over 99.7%.
- Loss Ratio prediction for Auto Insurance using Python: Implemented Random Forest and KNN regression to calculate the loss ratio for portfolios with more than 400K records. This method of feature engineering technique provided an accuracy of 95% and got a score of 0.83 on Kaggle.
- Battle of Neighborhoods: Used python to scrape, clean and analyze large datasets and built a model to evaluate and recommend a neighborhood to a user. Used the Foursquare API to get the specifics of the facilities near the neighbourhoods. Performed regional clustering to classify neihborhoods with decent services at fair rates.
- Analysis of Graduate Admissions:Pre-processed and cleaned the dataset using XLMiner, Python and conducted Exploratory Analysis using the Tableau Visualization to form the study hypothesis. Applied predictive analytics using the scikit-learn library to determine the chance of admission to a graduate school and achieved an accuracy of 95%.
- Sentiment Analysis of Tweets: Extracted tweets using the Tweepy API and cleaned them using NLTK library lemmatization and stemming. Used NLP techniques to construct a model and plot feelings using python libraries such as seaborn, matplotlib, plotly and ggplot and got an accuracy of 91%.
- Financial Data Analysis using Power BI: Clean data using Data View and use advanced DAX functions to efficiently modify the data. Built relationships between different datasets and designed highly interactive, visual and layered KPIs and charts to show trends in sales, revenues, profits and costs incurred.
- **Tableau Dashboards:** Visualized Bird Crashes and Corona Virus dataset to identify trends in past data and newly evolving virus data. The annual distribution of bird crashes across the USA and the relationship between weather, aircraft type and bird species have been identified. Analyzed the distribution of Covid 19 across the United States.
- E-Store Web Application:Implemented the MVC architecture and designed the responsive UI using the MEAN stack and used the NoSQL design for data handling. Hashed and salted passwords for secure login and used RESTful APIs like Facebook for login and credit card payment.