

Akhil Kumar Singh

Cell: +1 (929) 523-3983 | Email: aks769@nyu.edu | LinkedIn: [akhil-k-singh](#) | GitHub: [akhilksingh](#)

SUMMARY

Software Engineer with 4+ years of experience in C#, Java, JavaScript, ReactJS, SQL, Python, API Service development and well-versed with Software Development Life Cycle, Object Oriented Design, Design Patterns, Agile Methodologies. Graduated from New York University with a Master's in Informatics.

WORK EXPERIENCE

Graduate Research Assistant, New York University

Nov 2019 – Aug 2020

- **ELA (Machine Learning App)**

Developed Machine learning App using ReactJS, NodeJS and Elastic Search, NLP Doc2Vec model trained to enhance search and comparing capabilities for domains dealing with content wise and relative document search and reporting results using d3.js.

Associate Software Engineer, Genesys Telecommunication Labs

July 2017 – July 2019

- Developed Accelerator tool with ReactJS and Java Rest API which reduces product installation time by 40% for large Scale clients.
- Accomplished ad hoc project for client leveraging React, S3 bucket and lambda function for achieving completion before deadline.
- Coordinated bug fixing projects on frontend, services and database operation bugs helping improve client retention & expectation.
- Worked on developing mobile compatible application in React JS which reciprocate subset of product services leveraging product API's which account to increase in client operations, productivity, and revenue.
- Build an end to end secure web service for a Bank using WCF SOAP/REST TLS framework enable client to improve payment service.
- Gathering functional requirements, developing technical specifications, designing proof of concepts & communicating to stakeholders.

Software Development Analyst, Accenture Services

Oct 2014 – Jan 2017

- Developed .Net MVC application for Audit Management. Performed requirement gathering, helped in designing the prototype and developed a dashboard for the application which helps client in speed up the process by 40% and save 30% efforts.
- Conducted unit and functional tests using Visual Studio, increasing code coverage to 85% and minimizing defect leakage by 20-25%.
- Enhanced the client's applications by identifying, removing bugs and updated the queries for better performance and flow of control.
- Optimized processing time of .Net application by adding async flows for independent tasks resulting in 23% faster response.
- Coordinated with business unit teams developing further enhancements of the performance management processes and tools.

ACADEMIC PROJECTS

- **Capstone Project: Interagency Work Zone Traffic Data Modeling and Analysis**

Analysis of cumulative effects of maintenance work by different government agencies on detour paths in Bronx using anomaly detection algorithms and building a dashboard in React JS and Node JS to provide interactive and geospatial insights for crashes and predicting significant impact like travel times, street throughput for detours using ArcGIS, sharedStreets and python.

- **Airbnb Pricing Tool for Hosts: Identifying Trends & Price Predictors**

Build Pricing tool for Airbnb host in Manhattan and Brooklyn using Linear Regression, Regularization on Airbnb Open data and got 63% Out of Sample Accuracy and analyzed could be further improved using sentiment analysis of reviews.

- **Book Recommender System**

Build Book Recommender System based on collaborative filtering model leveraging Alternate Least Square algo in PySpark to predict rating for the books and got the RMSE score of 0.87.

EDUCATION

New York University

New York, USA

Master's in Urban Informatics

Aug 2020

Relevant Courses: Applied Data Science, Machine Learning, Spatial Analytics, Big Data

Abdul Kalam Technical University

Uttar Pradesh, India

Bachelor of Technology in Computer Science

May 2014

Relevant Courses: Data Structures and Algorithms, Computer Networks, DBMS and Operating System

SKILLS

Programming Languages:

Python, C#, Java, JavaScript, React (TypeScript), NodeJS

Web Technologies & Tools:

Rest, Soap, HTML5, CSS, GraphQL
Git, Postman, JIRA, Docker

Big Data and Spatial:

Hadoop, HDFS, Spark, Elastic Search
ArcGIS, Mapbox, Carto

Data Management and Cloud:

SQL Server, AWS (SNS, Lambda, Dynamo, Elastic Search)