Akshita Lakkad

Contact no: (347) 529 8940 | Email ID: acl10003@nyu.edu | LinkedIn: akshita-lakkad |GitHub: akshitalakkad | GHC'21 attendee

EDUCATION

NEW YORK UNIVERSITY, NYC **Jan'21 - Present**

Master of Science in Computer Science

- Coursework: Design and Analysis of Algorithms, Cloud Computing, Operating Systems, Big Data, Machine Learning, Computer Vision, Artificial Intelligence, Human Computer Interaction, Information Security & Privacy

UNIVERSITY OF MUMBAI **Jul'15 – May'19**

Bachelor of Engineering in Information Technology with 15th Rank | GPA: 9.44/10

- Coursework: Software Engineering & Project Management, Intelligent Systems, Distributed Systems, Advanced Database Management, Object Oriented Programming, Web Programming, Data Mining & Business Intelligence

PROFESSIONAL EXPERIENCE

MICROSOFT CORPORATION | Software Engineer Intern **May'22 – Present**

- Working with the Continuous Integration – Build Services team to build a machine learning model that reliably predicts the build time of submitted pull requests (PR). The model uses historical telemetry data to predict build duration with a 97% accuracy.
- Collaborated with different teams to gain an understanding of the data and went on to unify the different scattered data sources into one main dataset of all the features that impact the build duration.
- Leveraged the concept of transfer learning to implement an autoencoder neural network which is deployed into a ML lifecycle workflow using Azure Kubernetes. The performance of the model is improved by re-training and re-deployment on newer data.

NYU IT – HIGH PERFORMANCE COMPUTING | Student Consultant **Jul'21 – May'22**

- Evaluating secure research data environments by researching about various security frameworks, protocols, and guidelines. Worked towards gathering information and building workflows for data ingestion, transfer and retrieval to/from the environment.

ZS ASSOCIATES | Business Technology Analyst **Jun'19 – Jan'21**

- Automated end-to-end workflow of data warehousing operations and built interactive dashboards for analysis and optimization.
- Conceptualized, executed, and maintained Sales Crediting systems on AWS and automated excel workbooks that reduced the client deliverable time by 50%. Led change management process by serving as Level II.
- Collated and analyzed historical data for goals and performance calculations of client's salesforce. Performed restatement and trend analysis to detect anomalies and inconsistencies in sales data.

ACADEMIA PROJECTS

REVERSE VISUAL SEARCH| AWS, OpenSearch, DeepFace python, ResNet CNN **Apr'22 – May'22**

- Built an image search engine from scratch which can find artifacts when queries are visual. The system was tested on images of faces from the LFW face dataset. Built the baseline model for generating facial embeddings using ResNet50 architecture.
- Improved upon this by training on FaceNet architecture. Further developed a kNN indexing instance in OpenSearch to find images similar to the query image based on cosine similarity of the face embeddings.

STOCK INFLATION PREDICTION BY SOCIAL MEDIA ANALYSIS | AWS SageMaker, Kinesis, SQS, SNS, DynamoDB, Flask **Mar'21 – Jun'21**

- Built sentiment analysis models and used NLP techniques to determine bubble stocks by continuously streaming data from various social media platforms like Twitter, Reddit (APIs) and performed regression analysis to formulate high returns/low risk portfolio.
- Developed a dynamic webapp to present the results of the above stated problem statement to provide market insights to users.

SPOTIFY DATA PREDICTION AND ANALYTICS |Jupyter, Python Pandas, Numpy, Scipy **Jun'21 – Aug'21**

- Built a recommendation system, computed the probability of a song being skipped or not using supervised machine learning with 90% accuracy. Performed feature importance using random forest classifiers on about 160k tracks containing 90+ unique features.
- Conducted predictive analysis to determine the hour of the day that results in maximum conversion rate of an Ad on Spotify.

SMART TEXT-VOICE CONTROLLED PHOTO ALBUM | AWS Lambda, Lex, Transcribe, CodePipeline, CloudFormation, Rekognition **Mar'21**

- Developed an intelligent photo album webapp that can search through keywords using text or sound. Used Amazon Lex to handle search queries, lambda for serverless computing and AWS Transcribe on frontend to transcribe speech to text.
- The code was deployed using AWS CodePipeline and CloudFormation to represent all infrastructure resources.

TECHNICAL SKILLS

Programming Languages:	Python, C++, Java, PHP
Web Technologies:	HTML5, CSS, JavaScript, Bootstrap, Materialize
Database and Warehousing:	SQL, ETL, AWS EMR, AWS RedShift, S3, Hadoop, DynamoDB, Spark, Spark-SQL
Other:	Machine Learning Algorithms, NLP, Tableau, Jupyter, Dash
Courses and Certifications:	Complete Data Science Bootcamp, Introduction to Machine Learning – Stanford, Probability & Statistics