

# Sambhav Shrestha

• sambhavshrestha1@gmail.com • (929) 319-6443 • sambhav101.github.io  
• linkedin.com/in/sambhav101 • github.com/sambhav101

## EDUCATION

**St. Joseph's University**, Brooklyn, NY

BS in Computer Science & Mathematics, May 2022 | Summa Cum Laude | **GPA 3.9**

- Honors & Activities: Presidential Scholar, Peer Tutor, Honors Student, Delta Epsilon Sigma, Dean's list, IT help desk support
- Relevant Courses: Algorithms & Data Structures, Databases, Multivariable Calculus, Linear Algebra, Prob & Stats

## SKILLS

Languages:	Python, Java, Kotlin, R, Bash, JavaScript, MySQL, PostgreSQL
Libraries and Frameworks:	PyTorch, TensorFlow, Pandas, Selenium, OpenCV, Django, React, Flask
Tools and Technologies:	AWS, Linux, Docker, GCP, Kubernetes

## EXPERIENCE

**Amazon**, Seattle, WA

Software Development Engineer | July 2022 – Jan 2023

- Worked in JWO-Tech org and managed microservices responsible for detecting change and handling shopping events in an Amazon Go stores,
- Upgraded service lambda using Kotlin reducing cost and latency, built the pipeline using CDK, and created metrics and alarms for logging and monitoring in AWS for continuous deployment,
- Automated the store bring up process that let us bring up more than 40 stores per week without minimal manual effort.

**Tarifica**, Manhattan, NY

Software/Data Engineering Intern | July 2021 – Apr 2022

- Built and maintained web-scrappers; creating new Django Models, APIs, and reporting tools to optimize server performance.
- Used PostgreSQL to manage and report data into the dashboard for visualization and analytics,
- Worked on regression models and sentimental analysis using NLP to analyze value and forecast growth of products

**Google Cloud**

GCP Summer Bootcamp Student | July 2021 – Sep 2021

- Completed 5-course Coursera specialization focused in GCP Compute, Kubernetes, and App engine; deployed and managed VMs in cloud, set up load balancer, and created database in Cloud storage like Cloud SQL and BigQuery.
- Earned skill badges by completing set of challenges in ML/AI, Kubernetes, Data Analytics, and web development in cloud.

**Microsoft Research**, Manhattan, NY

Data Science Student Researcher | June 2021 – July 2021

- One of 12 students selected and mentored by the leading scientists at MSR NYC to research various topics in Applied Statistics and Data Science
- Coded bash scripts/pipelines in Linux to obtain, inspect and wrangle data for firsthand analysis.
- Researched different papers and performed replication, and extension; analyzed the statistical significance of results.

## RESEARCH and PROJECTS

**Replication and Extension of article “Police Officer Complaints”:**

- Reproduced the results and graphs obtained in the article by using Bash to wrangle data and R to perform analysis and visualization; Further researched into the data to extend interesting findings and published it into shiny web app.

**Stock Price Prediction using LSTM** (Pandas, TensorFlow, Matplotlib):

- Designed a deep recurrent neural network (RNN) that uses LSTM approach to model the data of different stocks obtained from alphavantage API; performed a time-series analysis to clean data; obtained an accuracy of 80%.

**Twitter Sentiment Analysis in R using rtweet** (dplyr, tidyverse, ggplot):

- Developed a visualization dashboard that fetches tweets based on keyword and analyzes sentiment using lexicon approach; added extra feature that analyzes user input text by using text mining and feature extraction and deployed in shiny.

**Deutsch-Jozsa Algorithm in IBM's Quiskit:**

- Underwent research on reproducing the Deutsch-Jozsa algorithm in IBM's Quiskit Development Package, analyzing time complexities of classical computing vs quantum computing for the algorithm, and understanding working of quantum gates.