

# SASHANK SILWAL

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## WORK EXPERIENCE

### Binance

April 2024 – Present

#### Data Scientist: Risk AI

Dubai, UAE

- Developed macro fraudulent forecasting model (RNN) using TensorFlow (Python), enhancing temporal dependency capture by 5%, resulting in a 4% increase in the detection rate of anomalous transactions
- Utilized Spark for data preparation, conducting extensive exploratory data analysis and feature engineering, increasing the dataset's comprehensiveness by 20%
- Presented complex data science concepts through stakeholder presentations, resulting in the adoption of new policies.

### Bearaby Somnos Tech: DIFC

July 2023 – April 2024

#### Data Analyst

Dubai, UAE

- Executed comprehensive market analysis for weighted blanket in Europe, developing a data-driven entry strategy targeting an 8% market share in the DTC and ecommerce sectors
- Conducted A/B testing to refine product attachment rates, significantly boosting cross-sell and up-sell strategies
- Led analysis of customer purchase behaviors using SQL, achieving a 16% boost in targeted marketing effectiveness
- Executed market basket analysis identifying key cross-selling opportunities, leading to a 15% increase in cross-sell performance.

### Vanilla®: Estate Advisory Platform

June 2022 – August 2022

#### Software Engineering Intern

Los Angeles, CA

- Enhanced in-app user experience by designing React components, increasing user engagement by 7%
- Streamlined the GraphQL layer (Rails), achieving a 30% improvement in retrieval & update times for PostgreSQL attributes
- Collaborated with the Product Team on the engineering design doc to implement 3 new service driven backend features.

## RESEARCH EXPERIENCE

### CommNets Lab: New York University Abu Dhabi

January 2022 – May 2023

#### Machine Learning Researcher

Abu Dhabi, UAE

- Engineered and deployed a neural network model using Kotlin on a mobile browser to classify and block JavaScript code, resulting in a 27% improvement in web page load time for underserved countries.
- Compiled a comprehensive dataset of 127,000 JavaScript elements labeled with categories by extracting 500,000 elements from 20,000 popular web pages.
- Collaborated with Nokia Bell Labs to design models and perform browser performance analysis utilizing WebPageTest.

### Center For Global Sea Level Change

May 2021 – August 2021

#### Machine Learning Intern

New York (Remote)

- Implemented and evaluated a Bayesian probabilistic model for predicting long-term shoreline changes given geomorphological and geologic settings under different sea level rise scenarios
- Processed, interpolated, projected geospatial data to build a dataset of over 12 million data points
- Wrote customized Python scripts to create map intersections and model predictions that shortened run time from over 6 hours to under 20 minutes.

## PROJECTS

### DYOR: Crypto Analysis Web App (MERN stack)

[GitHub](#)

- Led a team of 3 to implement sentiment analysis, price prediction, and virtual coin portfolio features on a web application.

### Face Mask Detection using transfer learning (CNN, OpenCV, Transfer Learning)

[GitHub](#)

- Developed a complete face tracking and face mask detection solution to monitor mask guidelines violations in real-time.

## EDUCATION

### New York University Abu Dhabi (GPA: 3.96)

May 2023

Bachelor of Science in Computer Science, Minor: Applied Mathematics, Interactive Media

Abu Dhabi, UAE

## SKILLS

**Programming Languages:** Python (Pandas, NumPy, Pgmpy, scikit-learn), JavaScript, CSS C++, SQL

**Framework & Tools:** Git, Docker, Spark, Hive, CircleCI, GraphQL, Firebase, MongoDB, PostgreSQL, TensorFlow, GCP, AWS

## AWARDS

Best Presentation Award, Quantum Hackathon for Social Good in Arab World

April 2022

Top in the world awards for Mathematics, Cambridge International A Levels

May 2018