

# SASHANK SILWAL

[sashank.silwal@nyu.edu](mailto:sashank.silwal@nyu.edu) | +971 50 147 1945 | [ssilwal.com.np](http://ssilwal.com.np) | [linkedin.com/in/sashank-silwal](https://linkedin.com/in/sashank-silwal) | [github.com/sashanksilwal](https://github.com/sashanksilwal)

## EDUCATION

New York University Abu Dhabi

Abu Dhabi, UAE

Bachelor of Science in Computer Science, GPA 3.96

May 2023

Minors: Applied Mathematics, Interactive Media

Relevant Coursework: Computer Systems Organization, Linear Algebra, Probability and Statistics, Operating Systems, Intro to Machine Learning, Software Engineering, iOS Programming, BigData

## SKILLS

Programming Languages: Python, JavaScript, TypeScript, CSS (Including Bootstrap 4), C++, Swift, Spark, TensorFlow, SQL  
Framework & Tools: Git, Docker, Jira, GraphQL, Cypress, Firebase, MongoDB, PostgreSQL, BigQuery, ExpressJS, GCP, AWS

## Work Experience

Somnos Tech – DIFC: DTC Ecommerce

July 2023 – Present

Data Analyst

Dubai, UAE

- Streamlined data processing pipelines using **Python Kedro**, integrating warehouse APIs, Amazon S3 storage, and Airtable, reducing stockouts by 30% and improving daily inventory management
- Conducted A/B testing to refine product attachment rates, significantly boosting cross-sell and up-sell strategies
- Led analysis of customer purchase behaviours 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

- Designed and built user interface components with **React** and **TypeScript**, improving navigation flow and user experience
- Collaborated with the Product Team on the engineering design doc to implement 3 new service driven backend features
- Refined the **GraphQL** layer built atop **Rails**, enabling more efficient data retrieval and updates within the **PostgreSQL** database, enhancing application performance
- Enhanced unit and E2E testing, achieving 85% code coverage and reducing QA time by 30 minutes per deployment.

## Research Experience

New York University Abu Dhabi

January 2022 – May 2023

Machine Learning Researcher

Abu Dhabi, UAE

- Developed, trained, and deployed a **supervised machine learning model (Neural Network)** on a mobile browser (**Kotlin**) to classify JavaScript code that improved the page load time performance of mobile web pages by 27%
- Generated a comprehensive dataset of 127,000 JavaScript elements labeled with categories by extracting 500,000 elements from 20,000 popular web pages
- Conducted evaluations of six models and performed browser performance analysis utilizing **WebPageTest**.

Center For Global Sea Level Change

May 2021 – August 2021

Machine Learning Intern

Remote

- Implemented and evaluated a probabilistic model for predicting long-term shoreline changes given geomorphological and geologic settings under different sea level rise scenarios
- Conducted processing, interpolation, projection, etc. on 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 easy-to-access coin portfolio features on a web application for crypto investors.

Face Mask Detection using transfer learning (CNN, OpenCV)

[GitHub](#)

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

## AWARDS AND HONORS

Best Presentation Award at The NYUAD International Hackathon 2022

April 2022

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

May 2018