Siddhant Dutta

Bajaj Finserv HackRx 4.0, SIH'23 Hackathon Winner & TalTech Research Intern

forsomethingnewsid@gmail.com | Linkedin | GitHub | Scholar | Portfolio

Education

SVKM's Dwarkadas J. Sanghvi College of Engineering **Dec. 2021 – 2025 Expt.**
Bachelor of Technology in Computer Engineering *Mumbai, India*

Experience

Bajaj Finserv Health **Jun 2024 – Present**
Data Engineering Intern
- Working on Big Data Analytics & Workflow Management production pipelines using Apache Airflow, PowerBI, PySpark & Azure.

IBM Quantum **Oct 2023 – Present**
Qiskit Advocate
- Gave Seminar on Quantum GAN Implementation and helped in enhancing Qiskit to support the Qiskit community.

TalTech – Tallinn University of Technology **May 2023 – Present**
ML Research Intern
- Solving a research topic of detecting driver sleepiness using deep learning in real-world scenarios under Prof. Sadok Ben Yahia.

Infiheal **Jun 2023 – Sept 2023**
Summer ML Intern
- Optimizing & personalizing mental health support through integrating Large Language Models (LLMs) into AWS Chatbot.

IGDTUW - Delhi Technical University **May 2023 – Present**
Summer ML Research Intern - Preprint Link
- Publishing a research paper regarding multi-label classification, & XAI analysis on PCOD dataset, under Prof. Nidhi Goel.

Chegg India **Nov 2022 – Present**
Computer Science Subject Matter Expert
- Providing expert guidance to users on a wide range of technical issues, such as Java, Python, & DBMS.

Projects

BAGAN-GP - Drift Aware Enhanced Balancing Augmented GAN-GP | *Tensorflow* **Jun 2023**
- In my Current Research Internship at TalTech, I implemented a Balancing Augmenting GAN with Gradient Penalty (BAGAN-GP) for driver drowsiness detection using the NTHU-DDD dataset, effectively addressing data imbalance and improving classification performance with Instance Hardness Threshold Algorithm for selection as it's a large dataset.

StockWatch: Stock Recommendation | *DGCNN, LSTM, FinBERT, LightFM, Selenium, Docker, FastAPI* **Jun 2023**
- Implemented a dockerized scalable state-of-the-art recommendation system using Graph Neural Networks (DGCNN), LSTM, FinBERT, and LightFM Collaborative Filtering, to deliver accurate and comprehensive stock recommendations. Also, Utilized data visualization tools to provide visually captivating stock graph analysis, incorporating dynamic trading view graphs.
  More Projects can be seen here at this **Link**.

Technical Skills

Languages: Python, Java, C, CUDA, Rust, Dart, HTML, CSS, JavaScript, SQL, OpenCV, LaTeX
Developer Tools: Linux, Docker, Nano, VS Code, Atom, Google Cloud Platform, Azure, Overleaf
Frameworks: Qiskit, Q#, Pennylane, DWave, Click, FastAPI, Pytorch, Tensorflow, VW, Classiq, Flutter, Actix, Rocket

Research Papers & Organizations

Project QUESC: Quantum Environmental Sound Classification | *Research Paper - Link*
- Authored and published in Procedia Computer Science with potential for transfer learning and real-world applications.

QWorld - QIntern 2023 | *Research Intern & Paper - Link*
- Authored and published Quantum Graph Neural Networks for Financial Fraud Detection and won the Best Project and Presentation Award in Quantum Machine Intelligence Journal.

Synapse | *Head of Machine Learning* **Sept 2022 – Present**
- Gained hands-on experience working with machine learning frameworks & wrote a research paper under their faculty.

Achievements

Smart India Hackathon - SIH 2023
- Won the 36-hour National level Hackathon of 200,000+ people organized by the Government of India by developing a Railway Mitron earning a prize of 100,000 INR.

Bajaj Finserv - HackRx 4.0
- Won the 24-hour National level Hackathon of 22000+ people by developing a Stock Watch earning a prize of 100,000 INR.

GATE 2024: Data Science and Artificial Intelligence (DA)
- Qualified & Achieved an **All India Rank of 253** out of a 500,000+ applicant pool.

Lines Of Code - ACM LOC 5.0
- Won 2nd Prize in the 24-hour Hackathon of 1000+ people by developing Digital Identity earning a prize of 30,000 INR.

IBM Certified Associate Developer - Quantum Computation using Qiskit v0.2X
- Create & execute quantum computing programs on IBM Quantum computers and simulators.

Microsoft Certified: Azure Fundamentals
- Demonstrated foundational level knowledge of cloud services & how those services are provided with Microsoft Azure.

IBM Quantum Challenge Fall 2022 & Spring 2023 Advanced
- Successfully ran classical ML & optimization algorithms on quantum kernels & TSP & Dynamic Circuits problems.