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 − Jul 2024**
Data Engineering Intern
- Enhanced labs-based dashboard efficiency by 17.5% by developing optimized Big Data Analytics with SQL, PowerBI & Azure.

IBM Quantum   **Oct 2023 − Present**
Qiskit Advocate
- Collaborated with ETH Zurich on quantum research and gave a seminar on Quantum GAN increasing community engagement.

Uni. of Southern Denmark & TalTech   **May 2023 − Present**
ML Research Intern & Collaboration
- Developing drowsiness detection and collaborating with NVIDIA, Volvo & Danfoss under my PI Prof. Sadok Ben Yahia.

Infiheal   **Jun 2023 − Sept 2023**
Summer ML Intern
- Integrated Large Language Models into AWS Chatbot, boosting personalization for mental health support by +25% utilization.

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 − Apr 2024**
Computer Science Subject Matter Expert
- Providing expert guidance to users on a wide range of technical issues resolving over 225 user queries with a 98% satisfaction rate.

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, ReactJS, 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 automated 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 Springer Nature Quantum Machine Intelligence Journal (Q1).

Synapse | *Head of Machine Learning*   **Sept 2022 − July 2024**
- 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 earning a prize 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 International Quantum Challenge Fall 2022 & Spring 2023 Advanced
Listed as Unstop's Top 80 Unstoppable E-School Leaders 2024 Across all India