Samriddha Basu

Email: samriddhabasu (at) gmail (dot) com
Phone: +91 9619402185 | +65 98852940

Website: http://samriddhabasu.github.io
GitHub: https://github.com/TheDorkKnightRises
LinkedIn: https://www.linkedin.com/in/samriddha-basu

TECHNICAL SKILLS

- Programming & Debugging (Python, Java, C#)
- Data Processing (Spark, Hadoop, numpy, pandas)
- Machine Learning (Spark ML, scikit-learn)
- Version Control (Git)
- Full Stack Web Dev (FastAPI, Flask, React)
- App Development (Android)
- Database Systems, ETL (RDBMS/SQL, NoSQL)
- LLMs (OpenAI, HuggingFace, LangChain)

EDUCATION

Master of Computing (Computer Science)   Aug 2022 — Jan 2024
School of Computing, National University of Singapore (NUS)   GPA: 4.65 / 5 (Dean's List AY23/24 Sem 1)

Bachelor of Engineering (Computer Engineering)   Aug 2015 — May 2019
Sardar Patel Institute of Technology, University of Mumbai   GPA: 8.86 / 10

CERTIFICATION

Foundation of Generative AI - Udacity   Feb 2025

Mobile Web Specialist - Google   Aug 2019

Front-End Web Developer Nanodegree by AT&T, Google, GitHub - Udacity   Nov 2018

Android Developer Nanodegree by Google - Udacity   Jan 2017

EXPERIENCE

Research Associate at **Asian Institute of Digital Finance, NUS**   Mar 2024 — Present
- Research and development to create a contract management platform that allows users to chat with their contracts, autofill forms, compare drafts, analyze risks and more (LangChain LLM, RAGFlow, FastAPI, React).
- Previously worked on research and development to create an automated video editing pipeline, that uses state-of-the-art advancements in AI/ML to prepare short form video content for multiple languages.

Graduate Research Assistant at **NUS Systems & Networking Lab**   May 2023 — Dec 2023
- Research and development on a Flask (Python) based webapp which provides users with investment advice based on ChatGPT's analysis of stocks and their financial indicators
- Collaborated with a small team of developers across Singapore and China, with other members working on related modules such as news impact analysis on stock prices.

Software Developer & Data Engineer at **Credit Suisse**   Jul 2021 — Jul 2022
- Used Palantir's Foundry platform for Cloud-based Big Data Analysis to work with high volume trade datasets and generate Market Risk-related insights and reports, as part of the Market Risk Technology team.
- Collaborated with colleagues spread across EMEA, APAC and the Americas via Agile Methodologies.
- I was the primary owner of a code repo/module which acted as the interface between the data pipeline and the visualization dashboards exposed to the business users and managed all deliverables for the repo.

Technology Analyst at **Credit Suisse**   Jul 2019 — Jul 2021
- (July 2020 - July 2021) Worked on a Java/Spring Boot-based backend for a Market Risk dashboard application, as part of the Market Risk Technology team. One of my major contributions was to increase the scalability manifold, with a significant reduction in the time taken by the daily task of processing the trade datasets by ~50% (from ~20 hours to ~10 hours) while removing the 5-day limit on historical data.
- (July 2019 - July 2020) Worked on a C#/.NET-based tool to manage trades in FX and Derivatives, as part of the Electronic Trade Flow Management team spread across Americas and APAC.

PROJECTS

Mystic Brush VR
Unity, XR, C# - https://thedorkknightrises.itch.io/mystic-brush-vr
A VR game for the PICO 4 standalone headset. Use a magic paintbrush to bring your creations to (virtual) reality. Initially developed as a prototype for the Lv99 + PICO VR Bootcamp in June 2023. Available on PICO Lab within the PICO Store, and on Itch.io.

Chehra – Face Recognition Attendance Management System
Android, Machine Learning, Image Processing, Django, IoT
A proof-of-concept attendance management system that supports recognition of multiple faces from classroom pictures. I was the lead Android developer working on the Teacher and Student apps.

NotePal – Material Notepad
Android, SQLite - https://play.google.com/store/apps/details?id=thedorkknightrises.notes
A beautiful Material Design note-taking experience with innovative features such as pinned and scheduled notifications, OK Google voice actions, Drive backup, etc. Available on the Google Play Store

Multi-user Adaptive Launcher for Android
Android, UX Design
A prototype launcher application for Android phones that enables multi-profile workflows on a single device, where each profile(e.g., Work, Travel) has its own list of applications and smart suggestions

PUBLICATIONS

- R. Dmello, S. Yerremreddy, **S. Basu**, T. Bhitle, Y. Kokate and P. Gharpure, "**Automated Facial Recognition Attendance System Leveraging IoT Cameras**," *2019 9th International Conference on Cloud Computing, Data Science & Engineering (Confluence)*, Noida, India, 2019, pp. 556-561.
- S. Yerremreddy, **S. Basu**, A. Ojha and D. R. Kalbande, "**Machine Learning Approach for Diagnosis of Autism Spectrum Disorder**," *2019 2nd International Conference on Innovative Computing and Communication (ICICC)*, Ostrava, Czechia, 2019.
  - Received Best Paper award at the conference.
- **S. Basu**, R. Gite, P. Singh and N. Raul, "**Multi-user Adaptive Launcher for Android**," *2019 Twelfth International Conference on Contemporary Computing (IC3)*, Noida, India, 2019, pp. 1-6.

POSITIONS OF RESPONSIBILITY

- Represented college as **Team Leader** in the Grand Finale of the inaugural **Smart India Hackathon 2017**
- **Teaching Assistant** for Professor Prachi Gharpure, Principal of Sardar Patel Institute of Technology, for the period from Jan 2017-May 2017
- As a **Microsoft Student Partner** (2017-18), I was responsible for sharing my knowledge and passion for tech with fellow students, building leadership and communication skills along with technical expertise
- As **Head of Technology** at **Entrepreneurship Cell**, Sardar Patel Institute of Technology for the period Jul 2017 – Jul 2018, I was part of the core organizing committee for various events
- Worked as **Mentor** and one of the **Lead Developers** in creating the **TechForSocial platform (TechForSocial.com)** for showcasing innovative ways to make use of technology for social causes under Dr. Dhananjay Kalbande, Dean of Industry Relations and Head of Computer Department at S.P.I.T.

AWARDS & ACHIEVEMENTS

- Recipient of **National Talent Search Examination (NTSE) Scholarship** from the **Government of India**
- One of 1000 recipients of **full scholarship** from Google India and Tata Trusts for the Android Developer Nanodegree at Udacity
- One of 350 recipients of **full scholarship** from Google India for the Front-End Web Developer Nanodegree at Udacity
- **Second runners-up** at the **NBF Tech Challenge 2018** organized by NMIMS and Royal Academy of Engg. UK