Samriddha Basu

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# TECHNICAL SKILLS

* Programming & Debugging (C, Java, Python, etc.)
* Data Processing (Spark, Hadoop, numpy, pandas)
* Machine Learning (Spark ML, scikit-learn)
* Version Control (Git)
* Web Development (HTML/CSS, JavaScript)
* App Development (Android)
* Database Systems, ETL (RDBMS/SQL, NoSQL)
* Linux Kernel

# EDUCATION

**Master of Computing (Computer Science)** August 2022 — Present

School of Computing, National University of Singapore (NUS) GPA: 4.65 / 5

**Bachelor of Engineering (Computer Engineering)** August 2015 — May 2019

Sardar Patel Institute of Technology, University of Mumbai GPA: 8.86 / 10

# CERTIFICATION

**Mobile Web Specialist** August 2019

Google

**Front-End Web Developer Nanodegree by AT&T, Google, GitHub** May 2018 — Nov 2018

Udacity

**Android Developer Nanodegree by Google** Feb 2016 — Jan 2017

Udacity

# EXPERIENCE

**Graduate Research Assistant** at **NUS Systems & Networking Lab** May 2023 — Dec 2023

- Developing a Flask (Python) based website which provides users with investment advice based on ChatGPT’s analysis of stocks and their financial indicators.

- Researching the benefits in productivity and efficiency offered by the use of generative AI in development.

- Collaborating 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** July 2021 — July 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.  
- Primarily worked with Python and Spark SQL, with some HTML/CSS/JS for dashboards and visualizations.  
- 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** July 2019 — July 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 significant contributions to this project was to increase its scalability manifold, with a significant speedup 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)  
- Developed and maintained a C#/.NET-based tool for managing trades in Foreign Exchange (FX) and Listed 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**](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 reality. Well, 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](https://play.google.com/store/apps/details?id=thedorkknightrises.notes)

## 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**](https://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.

# 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