Virang Parekh

virangparekh73@gmail.com | <u>LinkedIn</u> | <u>GitHub</u> | Google Scholar

EDUCATION

University of Mumbai | Mumbai, IN

Aug. 2018 – May 2022

Bachelors of Engineering in Computer Engineering

9.00 CGPA

Core Courses: Algorithms, Operating Systems, Cryptography and Image Processing

EXPERIENCE

Android Application and R&D Engineer

June 2022 - Present

Samsung Research

Noida, IN

- Developing and maintaining service framework modules for the Samsung Health App.
- Contributed to the development of E2EE for the Samsung Galaxy S24.
- Developed support for E2EE in devices targeting Android 13 and lower.
- Worked with AbstractThreadedSyncAdapter, WorkManager, Cloud Messaging and Coroutines
- Integrated SDKs from stakeholders, including SCloud, Knox Matrix and Samsung Account Client

Data Analyst Intern

June 2021 – November 2021

Tech Mahindra Remote

- Worked on a Multi-Modal Transportation based based project for a 'Pune' specific use case
- Worked on Data Wrangling, Warehousing, Data Modeling, DAX and Querying
- $\bullet \ \ \text{Built simple, lightweight, interactive and easy-to-understand dashboards for Visualizations}.$

Software Development and Data Analytics Intern

September 2020 – December 2020

Senguire

Pune, IN

- Created a machine vision system for real-time machinery part condition monitoring.
- Implemented multiprocessing, data preprocessing, queuing, and designed a lightweight interface.

Research and Publications

Performance Analysis of Various Asymmetric Public-key Cryptosystem | ICPCSN 2022

Springer Link

- Meticulous study of the RSA, ElGamal and other Public-key Cryptosystems
- Worked on putting forth a comparative compendium of these algorithms compared on Theoretical and Crypt-analytical parameters.

Video-based Micro Expressions Recogn. using Deep and Transfer Learning | ICDSAI 2022 | Springer Link

- A detailed discussion on the application of deep learning and transfer learning to detect micro-expressions.
- An analysis of the performance of pre-trained models like Xception, ResNet50, VGG19 etc. on the MEVIEW dataset.
- Experimental results have shown the 'Xception' model to out-perform all other models using Transfer Learning

Projects

Incisive Analysis Of EQ Using AV Data | Deep Learning, Transfer Learning and Bi-LSTMs

Major Project

- Investigated how the MSCEIT and the STAR method work for the measurement of EQ.
- Proposed a succinct approach to automate and digitize the manual process for the same

OneStop Fashion | Django, TensorFlow, OpenCV-2

GitHub Link

- A Reverse Image detection system which from the image detects what type of fashion apparel it is.
- Worked on designing the database, web scraping bots and integrating ML models with the software.

StudVisor | Django REST Framework, Sci-kit Learn

GitHub Link

- A web based recommendation system which predicts a student's placement opportunity.
- Designed the database, built REST APIs and ML models for prediction and recommendation.

Placement Coordinator

August 2021 – May 2022

Dwarkadas J. Sanghvi College of Engg.

Mumbai, IN

- Assisted Computer Engineering students with job search logistics and support.
- Coordinated between students and recruiters to facilitate a smooth interview process.
- Managed the placement database with student profiles, job stats as well as recruiter feedback.

Dwarkadas J. Sanghvi College of Engg.

September 2019 – May 2022 Mumbai, IN

• Worked on a solution for managers and salespeople to efficiently track deliverables and stock levels.

- Developed backend REST APIs for location tracking and bill management.
- Organized a seminar for Junior Year students for graduate studies and job prospects

Library Secretary

Unicode

July 2019 - June 2020

Shri Mahavir Jain Vidyalaya

Mumbai, IN

- Edited and moderated content of the institute's annual magazine
- Worked as a library secreatry, promoting Fine and Performing Arts
- Started a weekly book lover's club, trying to inculcate the habit of reading among students

DJS Aura

September 2018 – December 2020

Dwarkadas J. Sanghvi College of Engg.

Mumbai, IN

- Member of the collge's official drama club
- Wrote and performed Street plays around social issues like child abuse and Domestic Violence against women
- Participated and won multiple street play competitions in and around Mumbai.