Aditya Taparia

+916353757151 | aditya.m.taparia@gmail.com | Github | LinkedIn | Portfolio

EDUCATION

Indian Institute of Information Technology, Kottayam *Aug 2019 – May 2023*
Bachelors of Technology (hons.) in Computer Science and Engineering – CGPA : 8.6 / 10

Maheshwari Vidyapeeth
- Class 12th C.B.S.E – aggregated score : 92.6 % *April 2018 – May 2019*
- Class 10th C.B.S.E – CGPA : 9.0 / 10 *April 2016 – May 2017*

INTERNSHIPS

Wathare Infotech Solutions *Dec 2021 – April 2022*
Flutter Developer Intern

- Contributed to the development of a machine scheduling system that encompasses client, admin, manager, and operator interface in collaboration with a team of four members.
- The system utilizes Flutter framework for front-end development and a RESTful API and PostgreSQL database for back-end connectivity.
- Focused on enhancing the platform's performance, interactivity, and user experience, thereby optimizing its usability and overall efficiency.

Sapio Analytics *Dec 2021 – March 2022*
Flutter Developer Intern

- Collaborated with a team of Flutter developers to design and develop a mobile application, named Smart Cop, that empowers frontline police officers on beat towards achieving global policing standards.
- Integrated the front-end application with AWS back-end services and successfully deployed and tested several beta versions of the application.
- Worked with the design team to improve the user interface, and added interactive features to the application. Additionally, collaborated with the back-end team to resolve logical problems in the application's functionality.

GeeksforGeeks *March 2020 – Jan 2021*
Technical Content Writer

- Produced and published over 200 articles during an internship period.
- Enhanced the quality of existing articles by providing elaborative descriptions, augmenting them with relevant examples and interactive illustrations for better comprehension.
- The published works are accessible for review at auth.geeksforgeeks.org/user/aditya-taparia.

PUBLICATION

1. “An Efficient Stock Price Prediction Mechanism Using Multivariate Sequential LSTM Autoencoder”. A. Taparia et al., The Journal of Supercomputing, Springer. *In Review*
Available Preprint: https://doi.org/10.21203/rs.3.rs-2599921/v1

2. “HPix: A Novel Hierarchical Approach for the Generation of an Interactive Vector Tile Map from Satellite Imagery”. A. Taparia et al., Geosciences Journal, Springer. *Submitted*

VOLUNTEER WORK EXPERIENCE

Max Solutions *April 2022 – May 2022*
Part-time Job

I volunteered my services part-time at Max Solutions, where I was responsible for the assembly and disassembly of computer hardware, including CPUs, monitors, and laptops. In addition, I provided technical support by addressing OS related problems.

Bolt IoT *Dec 2020 – Feb 2021*
Student Partner

Volunteered as a promoter for Bolt IoT's IoT and ML online training program, using social media and webinars to raise awareness for the initiative.

PROJECTS

Intelligent Portfolio Allocation: A sentiment based approach *Aug 2022 – April 2023*

Time Series Forecasting

We are employing a unique hybrid methodology for predicting stock prices, utilizing this information to determine the optimal allocation approach based on the user's specified level of risk tolerance.

Vector Map Generation from Satellite Images *Jan 2022 – April 2023*

GAN Neural Network

I have implemented a novel conditional generative adversarial network (cGAN) called HPix that learns a mapping from input images to output images. I have trained this network to generate a vector base map from the satellite image. This network has outperformed various state-of-the-art models.

Learn It – E-learning application. *Aug 2021 – Nov 2021*

Flutter Firebase Application

This is a Flutter Firebase application that provides a platform for teachers to share their knowledge through recorded lectures and students to access and engage with the content.

BOROMap – Online tool for lending and borrowing. *April 2021 – May 2021*

MERN Stack Application

This application enables users to easily lend or borrow items within their local community, with the frontend implemented using ReactJS, MapboxGL, and ExpressJS and the backend supported by MongoDB.

Image Editor *Oct 2020 – Dec 2020*

Digital Image Processing

Designed and developed an image processing GUI application using OpenCV, Tkinter, and Python programming that offers a comprehensive selection of filters, such as sharpening, sketching, and cartooning, and image editing functionality, including contrast, brightness, and image saving and resetting controls.

TECHNICAL SKILLS

Programming	Python (Pandas, Tensorflow, PyTorch, NumPy, Scikit-learn), C/C++, CSS, Dart (Flutter), SQL.
Miscellaneous	LATEX(Overleaf/R Markdown), Microsoft Office, Colab, Jupyter Notebook, Firebase, Git.
Soft Skills	Time Management, Teamwork, Problem-solving, Documentation, Engaging Presentation.

ACHIEVEMENTS & QUALIFICATIONS

2021 **5094th Rank**, Hash Code 2021

2020 **Winner**, Intra college Hackathon

2019 **97.48**, Join Entrance Examination (JEE) Mains

RESEARCH INTERESTS

Neural Networks, Deep Learning, Reinforcement Learning, Natural Language Processing, Computer Vision.

CONFERENCE & WEBINAR

1. Data Science and Machine Learning in the real world, Dr. Rafal Rzepka *IIITK, 2022*
2. The International Conference on Innovative Trends In Information Technology *IIITK, 2019*

CERTIFICATE

Coursera	Web Applications for Everybody Specialization Course by University of Michigan
Coursera	Neural Networks and Deep Learning Course by DeepLearning.AI
Coursera	Machine Learning Course by Stanford University