OTHER PROJECTS

Identifying Candlestick Patterns using Deep Learning *September 2020*
Independent Project

- Collected historical data for **10 large cap** stocks having high volumes from the **Nifty 50** Index using **Python**.
- Converted the historical stock data into **Candlestick** charts and classified them according to **price** movements.
- Trained a **Convolutional Neural Network** to classify the Candlestick charts with an accuracy of **62 %** .
- Implemented an algorithm to identify **"patterns"** on the Candlestick charts by using the **activations** generated while classification and visualised these patterns using **heat maps**.

Bird Identification Website *April 2020*
Independent Project

- Developed a website which can identify **27** species of Indian birds with an accuracy of **92.6 %**.
- Scraped nearly **3000** images in all of a variety of bird species using **JavaScript Console** for Google Images.
- Trained a neural network on the data collected above using **Transfer Learning**.

Event Driven Backtesting System *December 2020*
Independent Project

- Designed and implemented an end to end **event driven backtesting** system from scratch in **Python** to measure the performance of a user defined trading strategy on historical market data.
- Integrated an interactive **candlestick chart** to help the user visualize the trades taken by the strategy.

Circuit Simulator *May 2020*
Course project | Prof. Himanshu Bahirat *Electrical Department, IIT Bombay*

- Implemented a **General Circuit Simulator** in **Python** that calculates the conduction matrix, applies **Node Voltage Analysis** to the electrical circuit and returns the current and voltage across the sources.
- Developed the code to plot the **Flux linked waveform** for given inputs to transformer in **Python**.

Financial Statement Analysis *September 2020*
Course project | Prof. Varadraj Bapat *SJM School of Management, IIT Bombay*

- Analysed the annual statement of **Mahindra & Mahindra** and investigated the accounting procedures followed while making the statement as well as the **Corporate Governance Policy** of the company.
- Studied the **balance sheet**, **profit & loss statement** and the **cash flow statement** of the company.

POSITIONS OF RESPONSIBILITY

Assistant Marketing Manager | IIT Bombay Racing *January 2020 - May 2021*
A team of 70 students working on designing and manufacturing an electric race car

- Conducted negotiations with multiple companies as a member of a team of 7 to work out **sponsorship** deals for generating **5 million** rupees annually to fund the development of India's **fastest electric racing car**.
- Acted as a **Senior Editor** for **Milestone**, the official team magazine; being responsible for **coordination** between content creators, editing the content, **ideation** and **curation** of new content ideas.

Organizer | Climbathon *February 2020*
Freedom, The Climbing Wall

- Organized a weekend long event to increase interest in **climbing** as a sport in the institute.
- Introduced **60+** participants to climbing and taught them **basic techniques** and **safety protocols**.
- Designed climbing problems for a variety of level of climbers from the very **beginners** to the **advanced** ones.

EXTRACURRICULARS

- Certified **Open Water Scuba Diver**, permitted to achieve a depth of **18 metres** without supervision.
- Completed **80+** hours of training in **Badminton** as a part of **National Sports Organisation** (**NSO**).
- Writer for **Towards Data Science**, a publication on **Medium** having more than **394K** followers.
- Represented India in an **International Spelling Bee** held in Putrajaya, Malayasia.
- Completed the **Elementary** and **Intermediate** drawing exams with an **A** grade in the latter one.
- Designed and built a **Bluetooth** controlled robotic car with **differential** steering mechanism as an entry to the **XLR8** competition held by the **Electronics and Robotics Club, IIT Bombay** held in August,2019.