ABHISHEK|ME19B069|INDIAN INSTITUTE OF TECHNOLOGY, MADRAS

# EDUCATIONInstitute Degree Timeline CGPA/%

Bachelor of technology, IIT Madras Mechanical engineering 2019 – 2023 7.91

Maa, Sarasvati School, Kaithal 12th Standard 2017 – 2018 89.8

Government School, Kaithal 10th Standard 2015 – 2016 86.4

# RELEVANT COURSES

* Strength of Materials
* Measurements and Instrumentation
* Introduction to Applied mechanics
* Introduction to C Programming
* Multivariable Calculus
* Differential Equations
* Manufacturing Processes
* Series and Matrices
* Introduction To Data Analytics\*
* Machine Learning Specialization, Washington University (Coursera)
* Design of Machine Elements\*

# PROJECTs

**Image Clustering with K means, Self**

* The idea is to create an Image clustering model which can be used to create clusters from large dataset of images.
* If someone is limited by computing resources then this technique can be used for sampling images. so that models can be tested on samples.

**Radiation Sensor, Measurements and Instrumentation Course project**

* The aim of this project was to study a radiation sensor and create a detailed analysis report on it.
* Studied about types of radiation sensor. Studied Geiger Muller Counter thoroughly and talked with its manufacturers.

**Project SBoard, Center for Innovation, IIT Madras**

* The aim of this project is creating a touch keyboard in which one can switch from keys to mouse with a simple gesture.
* Learning R-pi and programming embedded systems
* Did research for haptic touch and Ultrasonic feedback. Now building software for the user interface and functionality. Due to COVID-19 we are not able to experiment things.

**Project FND**

* The aim of this project is to classify news articles fake or real.
* To get the accurately classified collection of news as real or fake I built a deep learning **LSTM based** model and trained it. After using many training techniques, I got a **validation accuracy** of **0.9387** with training accuracy of 0.9538

# WORK EXPERIENCE

**Machine Learning Intern, Go Data Insights** Jun 2021 - Aug 2021

* ***Project GREEN SCORE*:** Built a system with which one can calculate the **greenery score** of an area with **longitude, latitude**, and radius. Built algorithm for calculating the green score. Used open street map api to fetch the data for the algorithm. Calculated the greenery of an area accurately up to **1km** [Blog](https://www.godatainsights.com/post/track-delhi-sustainable-development-goal-greenest-area)
* ***Project FIRE COUNT PREDICTION*:** Analyzed **NASA’s fire data** from the **MODIS satellite**. built a fire count prediction system for a region (a longitude, latitude bounding box). Worked with a dataset of around **4 million rows** [Blog](https://www.godatainsights.com/post/monitor-forest-fire-risk-for-insurance-purposes)
* ***Project CRYPTO PRICE PREDICTION*:** Built a stock price prediction system. But This is different from general stock price prediction systems because it also considers the effect of current news sentiment and shows its effect on prediction too. [Blog](https://www.godatainsights.com/post/fin-social-analysis-of-rising-cryptocurrencies)
* Created a robust **python package** for the projects which was directly inserted into the **backend**.

**Full Stack Developer Intern, Jivass Technologies**  Jun 2021 - Jul 2021

* Worked on ReactJS for frontend and **Django** for backend, the user database was **PostgreSQL** Created **React** Web Application. Worked a codebase of around **1GB**.
* Project Included **Dummy** Data Creation, **Primary** **Dashboards** for **Customers**, **Supervisors** (sub admin type role), and Super admin.
* Created Website till alpha phase, as per client demands

##### Full Stack Developer Intern, Chillitray Technologies Mar 2021 - May 2021

* Worked on building **token** and **OTP-based** authentication systems with sessions.
* Implemented **HTTP authorization**
* Created API s for sending **SMS’s, Emails** for verifications of accounts. Built different types of media and other types of **API’s** as per needs

# SKILLS AND KNOWLEDGE BASESoftware and Tools: AutoCAD, GIT

##### Programming Languages:

* Working With: C++, Python, SQL
* Worked With: Java, HTML, CSS, JavaScript, PHP, Django, React

##### Data Science Skills:

* Machine Learning, Deep Learning

#### Python Libraries:

* NumPy, Pandas, Matplotlib, Scikit-Learn, TensorFlow, cuDF\*

# HACKATHONS

# Deep Learning Hackathon, IIT Madras Apr 2021

* 2nd Rank
* Deepfake Image classification.
* Developed a convolution architecture with skip connections, interconnection, Depth wise separable convolutions.

**Univ- AI Hackathon, IIT Madras** Mar 2021

* Roc-AUC score of 0.869
* Data Augmentations, Feature engineering, classification. Used Stacking of 6 algorithms on top of a neural network.

# POSITIONS OF RESPONSIBILITIESPR Manager, National Service Scheme, IIT Madras Mar 2021 - present

* Here working as a PR manager in PR Team of NSS IIT M
* Learning to interact with people of different backgrounds and thinking’s

##### Project Member In SBoard, Electrical club, CFI, IIT Madras# Mar 2020 - present

* Working in project SBoard as a project member in the software module.
* Learning about R-pi, ROS, and Embedded Systems.
* Did research for haptic touch and Ultrasonic feedback

##### WebOps Coordinator, Mechanical Engineering Association, IIT Madras Aug 2019 - Apr 2020

* Created templates for websites with a team.
* Improved user interface to give a better user experience

# PUBLIC PROFILES

GitHub: <https://github.com/Abhis-123>

\* Currently Working

# Paused due to COVID-19