Vishal Agarwal

SECOND YEAR UNDERGRADUATE , CIVIL ENGINEERING

Indian Institute of Technology Kanpur

 (+91)-9413605678 — vishal260700@gmail.com — home.iitk.ac.in/vishalag — LinkedIn — Github

"Enthusiastic to Learn more and more"

Education

Indian Institute of Technology Kanpur   *Kanpur, India*

BACHELOR OF TECHNOLOGY, MAJOR IN CIVIL ENGINEERING   *2017 - Present*

Cumulative Performance Index/CGPA: 7.2/10.0

Awards and Achievements

2015   **Merit Certificate Awardee, Overall 10 CGPA**, Grade 10 national examination
2017   **Merit Certificate Awardee, Overall 92%,** Grade 12 national examination
2017   **JEE Advance,** Compete with 0.22 million students and come under top 4% students.
2017   **JEE Mains,** Compete with 2.2 million students and come under top 0.4% students.
2017   **INSPIRE Scholarship Awardee,** Government of India

Work Experience

Summer Internship,Under Prof. Sandeep Shukla [HOD CSE-IIT Kanpur]
Full Stack Developer
IIT Kanpur
May 2018 - July 2018

- Awarded **Excellency Award** by **Prof. Sandeep Shukla** for Excellent Performance.

- Build a **WEB APP** - **CONECTAR** to connect people of similiar interests across the globe.

- Applied the **'Crypto'** Module to Secure User Account with an **N Users, N+2 Databases**.Created a **Chat platform** using the **Sockets.io** and improved the **MongoDB Search Algorithm**.

- Github Repository -

Projects

Deep Learning in the Browser
Tensorflow.Js Core & Layers API
Google's most Recent Project

- Project using the **Tensorflow-Js** Library proposed by **Google** in **Google-IO-2018**.

- Contains Deep Learning models and examples like **Linear Regression, Polynomial Regression, XOR Problem Solver, AI Pong, Handwritten Digit Recognition, Color-Classifier.**

- Github Repository -

Machine Learning in the Browser
ML5.Js Higher-level API
Built over Tensorflow.Js

- Project using the **ML5-Js** Library built upon the **Tensorflow.Js** model which was proposed by **Google** in the year **2018**.

- Contains ML models and examples like **PoseNet, YOLO, Video-Classifier, Image-Classifier, LSTM Generator, Video Modal-ling using Regression, Feature Extractor, Style-Transfer.**

- Created **Clone** of **Google Teachable Machine** using a different regression model and algorithm.

- Github Repository -

Neuroevolution and A*

A Path-Finding Algorithm*
Artificial neural networks (ANN)

- Implemented the **A* Path-Finding Algorithm** to find the most optimum path from a bunch of obstacles over a grid in the browser only.

- Used **Neuroevolution** to generate **Artificial neural networks (ANN)** to solve the **Flappy bird game** in the browser only.

- Github Repository -

Technical Strengths

- *Machine Learning:* Tensorflow.Js,ML5.Js,NLTK,Tensorflow,Keras,SKlearn,NumPy,Pandas.

- *Programming:* C,Python,Dart,C#.

- *App Development:* Flutter, Xamarin-Forms.

- *Web Development:* Front-End Development, Back-End Development, MEAN Stack.

- *Tools:* Git,LaTeX,OpenCV,Matplotlib,Tesseract-OCR.

Hackathon Achievements

App Development Hackathon

Talent-Go
Code-Gym Challenge 2018
6-July-2018 - 10 July-2018

- Secured **7th** Position all over **World** among **1300** Participants.

- Received invitation to the **World Code Gym, Vancouver, Canada in Dec 2018.**

- Created an online documentation system **"Resturante"** to help chefs to document their recipes and play around with the new recipes they create to perfect their recipes time-by-time.

- Github Repository -

24 hours Android App Development Hackathon

Techkriti and Capgemini
IIT Kanpur
15-March 2018 - 18-March-2018

- Secured **1st** Position among all Campus Community.

- Build a interactive and functional Android app Named 'PMAY' under 24 hours using **MIT App inventor.**

- Github Repository -

Relevant Coursework

- *Machine Learning*

- *Deep Learning*

- *BlockChain*

- *Linear Algebra*

- *Multi-Variable Calculus*

Extra Curricular Activities

- **Head Web - Society of Civil Engineering**   *Kanpur,India*

- **Head Web - Science and Technology Council**   *Kanpur,India*

- **Head Software-Corner - Techkriti 2019**   *Kanpur,India*