Avraneel Pal

Computer Science and Engineering, Jadavpur University

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Education

Jadavpur University

B.E. in Computer Science and Engineering

2020-Present Linear Average of GPA: 8.3

Adamas International School

Indian School Certificate (ISC)

2018-2020 Percentage: 94.5%

Adamas International School

Indian Certficate of Secondary Education (ICSE)

2018 Percentage:: 96.8%

Experience

Airbus Group, India

Simulations and Physical Systems Project Developer

06/2023-08/2023

- Gained insight on various Navigation and Communication Systems used during a flight like MCDU machines.
- Worked on a live project that plots NOTAM areas in an interactive canvas that also gives corresponding trajectory details on clicking the canvas using **Python**.

Indian Statistical Institute, Kolkata

Research Intern

06/2022-07/2022

- Gained insight into how various Deep Learning Algorithms and Image Processing Techniques work.
- Worked on the Project 'Analysis and Implementation of Deep Clustering'.
- Applied the following skills: **PyTorch** and **OpenCV**.

Achievements

- Won the Jagadish Bose National Science Talent Search Junior Scholarship Award. *12/2018*
- Won the Atmadeep Young Scholars Scholarship. *2015*

Skills

- Java
- Node.js
- C++
- C
- PyTorch
- OpenCV
- Express.js
- Javascript
- Bash
- Pandas
- Socket.IO
- MongoDB

Projects

NOTAM Area Simulator

06/2023-08/2023

This simulator plots NOTAM areas (or, No Fly Zones) given the details on an interactive canvas using **matplotlib**. The user can also click on the canvas to plot the points of a custom trajectory and the prgram will correspondingly store the details of the trajectory.

Multi Client Chat Application

01/2023-03/2023

A multi-client chat application using **Socket.IO** and **Express.js** where users can join a common room to send text and image data to each other. Users who sign up have their data stored in a **MongoDB** database. Images from one user are uploaded to cloudinary and then sent to the other users.

Analysis and Implementation of Deep Clustering

06/2022-07/2022 (Link to paper)

The goal of this project was to propose a modified target class membership distribution function for the **Deep Embedded Clustering** technique by implementing and analyzing the paper titled “Unsupervised Deep Embedding for Clustering Analysis.” This involved implementing an Autoencoder using **PyTorch**.

Certificates

Introduction to Basic Game Development Using Scratch *04/2022*

Issued by Coursera for the completion of the course 'Introduction to Basic Game Development Using Scratch.'

Algorithmic Toolbox *09/2021*

Issued by Coursera for the completion of the course 'Algorithmic Toolbox.'