

Abhinav Jindal

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EXPERIENCE

D.E. Shaw

June 2020 – Present

Associate Developer

Hyderabad, India

- Working in a division **Schrodinger** on **LiveDesign** platform built for material science and drug discovery
- Full-stack developer for both back-end and front-end of multiple applications running on an extensive tech stack
- Engineering Owner of **Admin Panel** (an application handling significant configurations of the LiveDesign) and **LiveDesign Learning** (an interface for communication between LiveDesign and machine learning models)

Linkbal

May 2019 – July 2019

Data Science Intern

Tokyo, Japan

- Worked on designing a model for **Event Cancellation Prediction** using **CatBoost** algorithm and neural networks, improving the ranking order with events most likely to be canceled at the bottom.

EDUCATION

Indian Institute of Technology (IIT), Ropar

July 2016 – May 2020

Bachelor of Technology, Computer Science

Punjab, India

- **CGPA:** 9.05/10, amongst top 10 in the batch
- **Relevant Coursework:** Machine Learning, Computer Vision, Artificial Intelligence, Multimedia Systems, Digital Image Analysis, Data Structures, Algorithms, Databases, Operating Systems, Software Systems, Computer Networks, Probability Theory and Stochastic Processes, Discrete Mathematics, Linear Algebra

PROJECTS

Medical Segmentation Decathlon

- Worked on generalizability of 3D medical image segmentation across 10 different tasks and adapting to unseen task without human annotations.
- Used a U-NET FCN-based model along with 3D image processing techniques, producing results comparable to state-of-the-art.

Multimodal Learning for Audio-Video Compatibility

- Proposed an approach for predicting compatibility order of multiple YouTube videos to an audio song based on a similarity measure.
- Given an audio and a video, the algorithm extracts various features like emotions, transitions, pace etc., and measures similarity between these features to find the compatibility order. The algorithm was evaluated based on number of views.

Emotional ChatBot

- Built a conversational chatbot that generates suitable responses using Sequence to Sequence model.
- Improved it using embedding layer for compactness and attention and teacher forcing mechanism.

Demosaicing

- Full color image reconstruction from incomplete color samples output from an image sensor overlaid with a CFA.
- Compared various algorithms like NEDI, Kimmel and LMMSE using the PSNR values to determine the better method.

SKILLS

Languages : Python, Java, Django, React, JavaScript, TypeScript, PHP, HTML/CSS, PostgreSQL, MySQL

Packages : Pandas, Keras, Tensorflow, Scikit-learn, numpy, OpenCV

Tools : Jupyter, Colab, MatLab, git, \LaTeX , Microsoft Office

ACHIEVEMENTS

- Merit Scholarship at IIT Ropar for securing a rank under 1500 in JEE Advanced.
- **AIR-1343** in JEE Advanced (**99.91 percentile**) - in top 0.2% shortlisted candidates (total 1.5million applicants).
- **State Topper** in JEE Mains (**AIR-2405, 99.83 percentile**)