Abhinav Jindal

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EXPERIENCE

SCHRÖDINGER | Developer 1
Dec 2021 - Aug 2022 | Hyderabad, India

- Developed data pre-processing, computational and visualization tools to accelerate drug discovery and material science.
- Improved end-to-end pipeline of **LDLearning**, an interface between LiveDesign platform and machine learning models.

D.E. SHAW | Associate Developer
June 2020 - Nov 2021 | Hyderabad, India

- Engineering Owner of **Admin Panel**, worked on improving tech stack and overall development experience.
- Incorporated JWT authentication, SSO support in microservices, and other ACL related improvements.

LINKBAL | Data Science Intern
May 2019 - July 2019 | Tokyo, Japan

- Worked on modeling **Event Cancellation Prediction** and improve the event ranking order according to likelihood of success.
- Analysed features in existing past data and designed prediction models using **CatBoost** and neural networks.

PROJECTS

MEDICAL SEGMENTATION DECATHLON
Aug 2019 - Apr 2020

- Worked on modeling single 3D image segmentation across different tasks and adapting to unseen task without annotations.
- Trained 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
Sept 2019 - Dec. 2019

- Proposed an approach for predicting compatibility order of 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 using 'number of views' as a metric.

DEMOSAICING
Feb. 2018 - Apr 2018

- 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 metric.

ACHIEVEMENTS

- Merit Scholarship at IIT Ropar for securing an **AIR-1343 (99.91 percentile)** in IIT-JEE exam and **State Topper** in JEE Mains.
- Certificate of participation in Inter-IIT Tech Meet (rank 4/22).
- Won CTF prize at Schrödinger for finding a crucial ACL leak.

EDUCATION

UNIVERSITY OF SOUTHERN CALIFORNIA, LOS ANGELES
Master of Science, Computer Science
August 2022 - May 2024

IIT, ROPAR
Bachelor of Technology, Computer Science
July 2016 - May 2020
CGPA: 9.05 / 10.0
(amongst top 10 students)

SKILLS

PROGRAMMING
Python, Java, C/C++, Django, React, JavaScript, TypeScript, Docker, PHP, HTML/CSS, PostgreSql, MySQL, Kubernetes

PACKAGES
Keras, Tensorflow, OpenCV

TOOLS
Jupyter Notebook, Colab, MatLab, git, LaTeX, Microsoft Office

COURSEWORK

GRADUATE
Analysis of Algorithms
Database Systems

UNDERGRADUATE
Computer Vision
Artificial Intelligence
Machine Learning
Multimedia Systems
Image Analysis
Data Structures
Algorithms
Databases
Operating Systems
Computer Networks
Probability Theory
Linear Algebra

LINKS

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