

Pranav Balaji

LinkedIn | GitHub

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EDUCATION

BITS PILANI

B.E. COMP. SCI. & ENG.

2019 - 2023 | Hyderabad, India

COURSEWORK

UNDERGRADUATE

Data Structures and Algorithms

Machine Learning

Natural Language Processing

Information Retrieval

Computational Neuroscience

Bio Inspired Algorithms

Database Systems

Computer Graphics

Object Oriented Programming

Quantum Info and Computing

SKILLS

PROGRAMMING

LANGUAGES:

Python • C++ • SQL

MATLAB • GLSL

TECH STACK:

PyTorch • NumPy • Pandas

Dask • MySQL • Flask

React.js • OpenGL

CERTIFICATIONS

MACHINE LEARNING

Coursera | 11 weeks | MATLAB

DEEP LEARNING

Coursera | 17 weeks | TensorFlow

GANS

Coursera | 4 weeks | PyTorch

EXTRA-CURRICULARS

CLUBS

SANSKRIT AND FOREIGN LANGS.

• Japanese div. Member | 2019 - 2020

• Japanese div. Lead | 2020 - 2021

HOBBIES

Scuba diving (Advanced Open Water PADI certified) • Origami •

Speedcubing

WORK EXPERIENCE

ASSOCIATE ML INTERN | WADHWANI AI

Apr 2022 - July 2022 | Summer Internship

- In partnership with the Indian Central TB division
- Worked on the Tuberculosis Adherence project which aims at predicting treatment outcomes for patients
- Worked on encoding schemes of categorical data
- Addressed the loss-metric mismatch and explicitly optimized models on the required metric

PROJECTS

SIGN LANGUAGE TRANSLATION | NLP • DL • COMPUTER VISION

March 2022 - Apr 2022 | PyTorch • Transformers • Huggingface

- Led a team of 6 for the project
- Processed video sequences containing German Sign Language and produces translated German text
- Heavily fine-tuned the pre-trained T5-small model to leverage its existing German knowledge
- GitHub Repository: //Sign-Language-Translation

PARAPHRASE GENERATOR | NLP • DL • CONTINUAL LEARNING

Oct 2021 - Dec 2021 | PyTorch • Transformers • Hugging Face

- Continual Learning using Elastic Weight Consolidation
- Fine-tuned the Pre-trained T5 transformer model for paraphrase generation
- Significantly reduced catastrophic forgetting on pre-trained tasks after fine-tuning
- GitHub Repository: //Transformer-Continual-Learning

DODO SHOWS | FULL STACK WEB APP

Feb 2021 - Apr 2021 | Flask • MySQL • React.js • Heroku

- Incorporates functionality of IMdB and BookMyShow; Movie booking with categorical (private/public) list management
- Ability to add friends and leave reviews
- Led a team of 4 for the project
- GitHub Repository: //dodoshowsrc
- Website: //dodo-shows. Sample username and password: "pranav", "pranav"

COMPETITIONS

HACKON WITH AMAZON | 1ST POSITION NATIONWIDE

June 2021 | TensorFlow.js • WebRTC • Node.js • MySQL • Heroku

- A game-ified virtual fitness application designed for lockdown times
- Real-time Machine Learning on the webcam feed for posture identification
- Video call system with live ranking against a friend
- GitHub Repository: //vFit