Nishant Singh Pall

nishantpall877@gmail.com | linkedin.com/in/Nishant | github.com/Nishant| Nishant-Pall.github.io

Education

Punjab Engineering College (Deemed To be University)   Chandigarh, India
Bachelor of Technology in Mechanical Engineering   *Aug. 2018 – Present*
Overall GPA: 7.72 based on 5 semesters

Government Model Senior Secondary School   Chandigarh, India
Senior School Examination, CBSE-2018   *Aug. 2016 – Mar 2018*
Overall Score: 90.2 Percent

Experience

Research Assistant   October 2020 – April 2021
German Aerospace Center (DLR)   *Cologne, Germany*
- Obtained and cleaned data using conventional NLP techniques for training ASR models.
- Leveraged Speech-to-Text models and scorers from Mozilla to evaluate performance on various generic datasets.
- Used the kenLM toolkit and a corpus consisting of software engineering jargon to generate scorer.
- Achieved near perfect BLEU score on corpus obtained from course provider websites.

Software Engineering Intern   December 2020 – April 2021
BuildAR   *Panchkula, India*
- Built front end components using ReactJS alongside handling React-Router for easier navigation.
- Worked on UI/UX design using recommended practices to maintain persistent design and commonality.
- Developed SQL scripts for handling user data and communicating with the database.
- Worked on EJS templates that would in turn use nodemailer to send particular emails.

Software Engineering Intern   August 2020 – September 2020
Appcilious pvt. ltd.   *Bengaluru, India*
- Carried out sentiment analysis of reviews scrapped from Playstore review section of popular applications.
- Achieved expected design of workflow from obtaining data to deploying the API.

Projects

Particle Identification and Analysis using Deep Learning   June 2020 – August 2020
- Analysed particle decay into muon-antimuon pairs using XGBoost to obtain the mass of Z boson with loss 0.05.
- Designed a model that is able to discriminate electromagnetic showers from the background basetracks.
- Identified showers using ANNs and RNNs as a result of interaction of Dark matter scattering with lead nuclei.
- **Tech Stack**: Python3, Tensorflow 2.0, PlaidML

Neural Machine Translation Application   April 2020 – June 2021
- Implemented attention mechanism alongside Teacher forcing and handled serving using FastAPI.
- Trained models on several langauges such as English, Spanish, German using GloVe embeddings.
- Achieved the best and worst BLEU scores as 32.08 and 26.07 respectively.
- **Tech Stack**: Python3, SpaCy, Keras, PlaidML, Pytorch, FastAPI, uvicorn

Babi ChatBot   July 2020 – August 2020
- Implemented the underlying concepts in the End-to-End Memory Networks research Paper.
- Developed a Q&A chatbot using the bAbI dataset released by Facebook Research.
- Achieved 94% accuracy on the vast corporal dataset.
- **Tech Stack**: Python3, Keras, SpaCy

Technical Skills

Languages: Python3, C++, SQL, JavaScript(NodeJS), Typescript, HTML/CSS
Tools/Libraries: Git, Neovim, Pytorch, Tensorflow 2.0, Keras, ReactJS, Redux, Docker, FastAPI, NLTK, SpaCy