ANOOP KUMAR

Phone: +91 9717083288 | **E-mail**: anoopkumar@iisc.ac.in | anoopkumariisc@gmail.com

EDUCATION

Indian Institute of Science (IISc), Bangalore *August 2019 - Present*
M.Tech, **Statistics and Machine Learning Lab**, CSA CGPA : Sem1: 7.8, Sem2: 8.0

GCET, Greater Noida *July 2014 - June 2018*
B.Tech, Computer Science and Engineering Final Perc.: 82.26

RECENT PROJECTS

Advanced Chatbots *(Project with British Telecom)* *Ongoing*
- Working on the System Act Prediction and Natural Language Generation (NLG) modules.
- Developed a GPT based transformer model for Response Generation in Few-shot scenario.
- The model achieved BLEU score of **63%** and Slot Error Rate of **3.1%**

Brain Networks *Ongoing*
- Modelled human brain as a network using fMRI data, to detect Alzheimer.
- Built a Hierarchical GCN based model, achieved **83%** accuracy on ADNI data, beats kernel-based methods.
- Working on scalable multiplex embedding techniques to incorporate multi-task fMRI.

Aspect-Based Sentiment Analysis (ABSA) *Nov 2020*
- Developed a NLP model to predict aspects and its polarity from restaurant reviews.
- Constructed dummy sentences from the aspect to convert ABSA to a sentence-pair classification task.
- Fine-Tuned the pre-trained model from BERT to achieved **85%** F1 score on Test data.

Sentiment Analysis on Code-Mixed Text *Oct 2020*
- Developed a NLP model for sentiment Analysis on Code-Mixed Hinglish Dataset (Semeval 2020)
- Used an ensemble architecture of convolutional neural net (CNN) and self-attention based LSTM.
- Code-Mixed data is handled using XML-R, achieved **68.5%** F1 score on Test data.

Few-Shot Link Prediction in Knowledge Graphs *Aug-Sept 2020*
- Made key modifications to the existing MetaR model for few-shot link prediction.
- The new model uses a semantic scoring function and pre-trained model entity embeddings
- The model improves the MRR from **26.1%** to **31.5%** on NELL-One dataset in 5-shot setting.

INTERNSHIP

Data Scientist Intern, Myntra *April- May 2020*
- Developed a Machine Learning pipeline to generate Personalized User Recommendations.
- Trained various embedding models to capture contextual information from user sessions.
- **MetaProd2Vec** is the best performing model with a mean cosine similarity of 0.72.

TECHNICAL SKILLS

Deep Learning	NLP, CNNs, Graph Neural Networks, LSTMs, KGs
Machine Learning	Gradient Boosted Trees, Clustering & Classification algorithms
Frameworks/ Libraries	Pytorch, Tensorflow, Gensim, Pandas, Numpy, ScikitLearn
BigData	Map Reduce, Hadoop(Basic), Pig

ACHIEVEMENTS

- Secured position among **top 150 teams** from a total of **23K** teams in Flipkart GRiD 2.0, a ML Hackathon.
- Secured **AIR 50** in GATE 2018 with a percentile of 99.95