Jatin Chauhan

Research Interests

Graph Representation Learning; Knowledge Graphs; Robustness; Natural Language Processing.

Work Experience

June, 2021- Google Al Research, Pre-Doctoral Researcher (Brain Resident).

Present

June, 2020- Learngram AI, RESEARCH INTERN.

August, 2020

January, 2018– **NewsInfo**, INTERN.

May, 2018

Education

July, 2017– June Bachelor Of Technology In Computer Science And Engineering, Indian Institute of Technology(IIT) Hyderabad, CGPA – 9.14/10.

Publications

2021 A Probabilistic Framework for Knowledge Graph Data Augmentation NeurIPS 2021 DCAI Workshop

Jatin Chauhan, Priyanshu Gupta and Pasquale Minervini

2020 Learning Representations using Spectral-Biased Random Walks on Graphs IJCNN 2020

Charu Sharma, Jatin Chauhan and Manohar Kaul

2020 Few-Shot Learning on Graphs via Super-Classes based on Graph Spectral Measures ICLR 2020

Jatin Chauhan, Deepak Nathani and Manohar Kaul

2019 Learning Attention-based Embeddings for Relation Prediction in Knowledge Graphs ACL 2019

Deepak Nathani*, **Jatin Chauhan***, Charu Sharma* and Manohar Kaul (* denotes *equal contribution*)

Preprints and Other Works

2021 Target Model Agnostic Adversarial Attacks with Query Budgets on Language Understanding Models

Preprint

Jatin Chauhan, Karan Bhukar and Manohar Kaul

2021 BERTOPS: Studying BERT Representations under a Topological Lens

Under Review in A* Conference

Jatin Chauhan and Manohar Kaul

2021 Contrastive Representations for Learning from Label Proportions

Under Review in A* Conference

Jay Nandy, Rishi Saket, Aravindan Raghuveer, **Jatin Chauhan**, Balaraman Ravindran and Prateek Jain

2021 Improving Graph based Multivariate Time Series Forecasting models under Sparse Data Inference Setting

To be Submitted

Jatin Chauhan, Aravindan Raghuveer, Rishi Saket, Jay Nandy and Balaraman Ravindran

Achievements

- 2020 Undergraduate Research Excellence Award
- 2019 Top 15 in PanIIT Hackathon: Artificial Intelligence for India
- 2019 Received Microsoft Research Travel Grant for ACL 2019 held in Florence, Italy
- 2018 Runner-Up: Tinkerer's Lab Competition on Al
- 2017 IIT JEE Advanced Rank 554
- 2017 KVPY Fellowship

Teaching

Introduction to Programming: My responsibilities included grading assignments and exams, conducting lab sessions for students and assisting in preparing the teaching material.

Service

Reviewer: ICLR 2022, NeurIPS 2021

External Reviewer: ICML 2021, AAAI 2021, ICLR 2021, NeurIPS 2020, EMNLP 2020,

ACL 2020, NeurIPS 2019

Volunteering: IIT Hyderabad ACM Chapter, NSS IIT Hyderabad

Projects

- 2021 Improving Negative Sampling in Contrastive Learning for Graph Classification
- 2020 Mathematical Question Answering via NALU based Transformers
- 2020 Image Captioning via Kernelised Attention
- 2019 Distant Supervision Relation Extraction Using Manifold-Mixup
- 2019 Knowledge Graph Embeddings via Attention based Random Walks
- 2019 Peer to Peer file sharing and distributed downloading system

Relevant Courses

Causal Inference, Software Engineering, Information Retrieval, Data Mining, Theory of Computation, Principles of Programming Languages, Computer Networks, Databases, Data Structures, Operating Systems, Compilers, Algorithms, Discrete Mathematics, Calculus, Probability, Linear Algebra