# Jatin Chauhan

#### Work Experience

July, 2024 - Jan, Triomics - Research Scientist.

2025 Primarily focused on developing LLMs over both structured and unstructured data (both RAG and non-RAG based). Alongside, I also spend around 50% of my time on deploying these models in the Triomics' product pipeline. This includes my involvement as a co-lead on a pilot project for a Fortune 10 client.

Nov, 2023 - March ScopeFour Capital LLC - Investment Analyst Intern, ...

2024 Conducted comprehensive equity investment research using diverse sources and developed a customized LLM tailored towards financial data analytics to substantially expedite the research analysis.

June, 2021 - Sep Google Research - Pre-Doctoral Researcher.

2022 Focused on developing ML algorithms for Google Ads, enhancing ad targeting and revenue generation for over 10 million SMBs. Led cross-functional collaboration to deploy sophisticated deep learning models across YouTube and Search platforms. Published multiple papers in top-tier AI conferences.

June, 2020 - Learngram AI - Machine Learning Intern.

August, 2020 Implemented advanced deep learning AI algorithms in beta versions of core products. Presented machine learning-based product concepts to investors and contributed to multi-year product release strategies across key verticals.

#### Education

Sep, 2022– June Masters in Computer Science (AI), University of California, Los Angeles. 2024

July, 2017– June BTech in Computer Science And Engineering, Indian Institute of Technology(IIT) 2021 Hyderabad.

### Skillset

Technical Machine Learning, AI, LLMs, RAG, Python, Pytorch, Azure, AWS, GCP, Git, CI/CD, SQL, Docker, Linux

#### **Publications**

2024 Fairness under Covariate Shift: Improving Fairness-Accuracy tradeoff with few Unlabeled Test Samples

**AAAI 2024** (also at NeurIPS 2023 AFT Workshop)

Shreyas Havaldar\*, **Jatin Chauhan\***, Karthikeyan Shanmugam\*, Jay Nandy and Aravindan Raghuveer - (\* equal contribution)

2024 Learning Over Molecular Conformer Ensembles: Datasets and Benchmarks ICLR 2024 (also at NeurIPS 2023 AI4Science Workshop)
Yanqiao Zhu, Jeehyun Hwang, Keir Adams, Zhen Liu, Bozhao Nan, Brock Stenfors, Yuanqi

Du, **Jatin Chauhan**, Olaf Wiest, Olexandr Isayev, Connor Coley, Yizhou Sun and Wei Wang

2023 Universality and Limitations of Prompt Tuning NeurIPS 2023

Yihan Wang, Jatin Chauhan, Wei Wang and Cho-Jui Hsieh

2023 Learning under Label Proportions for Text Classification EMNLP 2023 - Findings

Jatin Chauhan, Xiaoxuan Wang and Wei Wang

2023 Non-Uniform Adversarial Perturbations for Discrete Tabular Datasets CIKM 2023

Jay Nandy, Jatin Chauhan, Rishi Saket and Aravindan Raghuveer

2022 Multi-Variate Time Series Forecasting on Variable Subsets KDD 2022

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

2022 Domain-Agnostic Constrastive Representations for Learning from Label Proportions CIKM 2022

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

2022 BERTops: Studying BERT Representations under a Topological Lens IJCNN 2022

Jatin Chauhan and Manohar Kaul

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 (\* equal contribution)

#### Preprints and Other Works

2023 Beyond Traditional Text Classification: Generalized Zero-Shot Learning Approach for Long Documents

**Under Review** 

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

**Preprint** 

Jatin Chauhan, Karan Bhukar and Manohar Kaul

#### Achievements

- 2023 UCLA Innovation Challenge Finals
- 2020 Undergraduate Research Excellence Award
- 2019 Top 15 in PanIIT Hackathon: Artificial Intelligence for India
- 2019 Microsoft Research Travel Grant for ACL 2019
- 2018 Runner-Up: Tinkerer's Lab Competition on Al

#### Teaching

At UCLA Introduction to Computer Science I

At IITH Introduction to Programming

## Service

Reviewer ICML 2023, ICLR 2023, LoG Conference, NeurIPS 2022, ICLR 2022 (Highlighted Reviewer),

ICLR 2022-GTRL Workshop, NeurIPS 2021

External Reviewer ICML 2021, AAAI 2021, ICLR 2021, NeurIPS 2020, EMNLP 2020, ACL 2020, NeurIPS 2019

Volunteering Venture Accelerator at UCLA Anderson School of Management, IIT Hyderabad ACM Chapter,

NSS IIT Hyderabad