# AKSHAT GUPTA

CS PhD, UC Berkeley

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## **SUMMARY**

I'm a second year PhD Student at UC Berkeley affiliated with BAIR. I'm currently working on knowledge editing and memorization in LLMs.

SKILLS

Languages: Python, Go, MATLAB, C++, Javascript, C Tools: Pytorch, Huggingface, NLTK, Spacy Technologies: AWS, GCP, Azure, Dialogflow, Docker

#### EDUCATION

8/2023 - Present PhD, Computer Science University of California, Berkeley

Advisor: Gopala Anumanchipalli

MS, Electrical and Computer Engineering 1/2020 - 5/2021

Carnegie Mellon University

Advisor: Alan W Black

10/2017 - 3/2020 MS, Applied and Engineering Physics

Technical University of Munich, Germany

Thesis Advisor: Gregory Eyink (Johns Hopkins University)

8/2013 - 6/2017 **B.Tech, Electrical Engineering** 

Thesis Advisor: Renu Rameshan

Indian Institute of Technology Mandi

#### **EXPERIENCE**

## 6/2021 - 8/2023 Senior Associate, Al Research

JPMorgan Chase

- · Developed relation extraction models for financial knowledge graphs, resulting in a SIGIR 2023 paper [6] and a patent [4]
- · Led the design and deployment of solutions for public information discovery, enabling insights into companies and financial institutions, resulting in a patent [1]
- · Supervised a summer intern and mentored student teams from Columbia University and Carnegie Mellon University on sponsored capstone projects, fostering collaborative research and development.

# 8/2020 - 5/2021 **Teaching Assistant, Deep Learning (11785)**

Carnegie Mellon University

- Taught lectures on Transformers and GANs (Youtube links: Transformers, GANs-1, GANs-2)
- · Spearheaded testing and deployment of homework on building E2E speech to text systems

# **PUBLICATIONS**

# 1. PokerBench: Training Large Language Models to become Professional Poker Players Richard Zhuang, Akshat Gupta, Richard Yang, Aniket Rahane, Zhengyu Li, Gopala Anumanchipalli

2. Rebuilding ROME: Resolving Model Collapse during Sequential Model Editing Akshat Gupta, Sidharth Baskaran, Gopala Anumanchipalli

**EMNLP 2024** 

3. A Unified Framework for Model Editing

Akshat Gupta, Dev Sajnani, Gopala Anumanchipalli EMNLP 2024 Findings

4. Self-Assessment Tests are Unreliable Measures of LLM Personality

Akshat Gupta, Xiaoyang Song, Gopala Anumanchipalli BlackboxNLP 2024, co-located with EMNLP 2024

5. Model Editing at Scale leads to Gradual and Catastrophic Forgetting

Akshat Gupta, Anurag Rao, Gopala Anumanchipalli ACL 2024 Findings

6. REFinD: Relation Extraction Financial Dataset

Simerjeet Kaur, Charese Smiley, Akshat Gupta, Joy Sain, Dongsheng Wang, Toyin Aguda, Sameena Shah **SIGIR 2023** 

7. Probing Quantifier Comprehension in Large Language Models: Another Example of Inverse Scaling **Akshat Gupta** 

BlackboxNLP 2023, co-located with EMNLP 2023

8. Intent classification using pre-trained language agnostic embeddings for low resource languages Hemant Yadav, Akshat Gupta, Sai Krishna Rallabandi, Alan W Black, Rajiv Ratn Shah Interspeech 2022

 Acoustics Based Intent Recognition Using Discovered Phonetic Units for Low Resource Languages Akshat Gupta, Sai Krishna Rallabandi, Alan W Black ICASSP 2021

## **PATENTS**

1. Method and system for automated public information discovery

**Akshat Gupta**, Simerjot Kaur, Xiaomo Liu, Armineh Nourbakhsh, Andrea Stefanucci, Alex Woodgate, Sameena Shah US Patent 12,001,491

2. Method and system for detection of anomalous rejections of foreign exchange requests

Nacho Navarro, Xiaomo Liu, Simran Lamba, **Akshat Gupta**, Sameena Shah US Patent App. 18/085,104

3. Method and system for domain adaptation of social media text using lexical data transformations

Akshat Gupta, Xiaomo Liu, Sameena Shah

US Patent App. 18/103,858

4. Method and system for understanding financial documents

Simerjot Kaur, Charese Smiley, Joy Sain, Suchetha Siddagangappa, **Akshat Gupta**, Sameena Shah US Patent App. 17/647,356

## ACADEMIC SERVICE -

## Reviewing

- · ICLR 2025
- ACL Rolling Review : June 2024, August 2024, October 2024, December 2024
- ACL 2023
- EMNLP 2022

# **Workshop Organization**

· 4th Workshop on Knowledge Discovery from Unstructured Data in Financial Services, SIGIR 2023

## ADVISING -

Maochuan Lu, Undergraduate UC Berkeley	2024 - Present
Richard Zhuang, Undergraduate UC Berkeley, Published [1]	2024 - Present
Dev Sajnani, Undergraduate UC Berkeley, Published [3]	2024
<ul> <li>Anurag Rao, Undergraduate UC Berkeley ( -&gt; MS, University of Oxford), Published [5]</li> </ul>	2023 - 2024
• Xiaoyang Song, MS Columbia University ( -> PhD, University of Michigan), Published [4]	2023
Anant Singh, MS NYU (-> Machine Learning Engineer, Apple)	2022 - 2023