# JAY PATEL

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## Professional Summary - <u>iDRAMA Lab</u>

- 3 papers accepted ACL '24, ICWSM '24 | 3 papers in submission ACL '25, ICWSM '25
- Using LLM, detect *hate-speech & misinformation* from social media platforms, e.g., Twitter, Reddit, 4chan.
- Understanding *multimedia* (*memes/videos*) to characterize sentiments in online Web communities.
- 5+ years of academic research experience Large-scale internet data measurements, LLM, Social Networks, Statistical methods, (2019-2021: Computational Game Theory and Evolutionary Computing).
- **3+ years of industrial work experience** iOS Software Engineer, Full Stack Engineer, UI/UX Designer.
- <u>USAToday(Media Coverage)</u> Computer vision model to detect <u>Kekistani flag</u> from 1M 4chan images. [Link]

#### **Conference Publications**

- → Large Language Models for Content Moderation Submitted to ACL ARR '25
  - An explainable framework to detect antisemitism using LLM (Llama 3.1 8B, 70B)
- → Aya dataset: An ... instruction tuning (CohereForAI: Open-source contrib.) Accepted to ACL '24
  - ◆ Lead contributor to process and release [513 million]+ data points Huggingface-Aya
- → Podcast Outcasts: Understanding Rumble's Podcast Dynamics Submitted to ICWSM '25
  - Analyzed [13K hours]+ of videos from Youtube & Rumble to understand the political stance using the CLIP model (CLIP + Clustering on video frames).
- → iDRAMA-Scored-2024: A Dataset of the Scored Social Media Platform Accepted to ICWSM '24
  - Collected, analyzed & released [56 million]+ data points Huggingface-Scored
- → iDRAMA-rumble-2024: A Dataset of Podcasts from Rumble Accepted to ICWSM '24
  - ◆ Rumble's multimedia data analysis & released [650K]+ data points Huggingface-Rumble
- → From HODL to MOON: Understanding ... Cryptocurrency Ecosystem
  - Trained emotion detection Roberta model & classified [150 million] + Reddit posts

#### **Education**

Ph.D. candidate, Computer Science, StateUni of NY@Binghamton, N	Y GPA: 3.80	Aug 2021 - Present
- Advisor: <u>Dr. Jeremy Blackburn</u>		
MS-Research, Computer Science & SE, Auburn University, AL	GPA: 3.57	May 2021
MS, Computer Science, Northwestern Polytechnic University, CA	GPA: 3.76	Dec 2016
<b>BE, Computer Engineering,</b> Gujarat Technological University – India	GPA: 3.00	May 2014

### **Industry Experience**

Software Engineer Intern, iOS – IMVU, Redwood City, CA	July 2017 - Dec 2017
Software Engineer Intern – Attala Systems Corp., San Jose, CA	March 2017 - July 2017
iOS Software Engineer Intern – (1) RiteTag, (2) Filmakr Labs LLC	May 2016 - Oct 2016
iOS Application Developer – Cimcon Software PVT LTD, India	April 2014 - Aug 2015

#### **Technical Skills**

Languages: (Proficient - Python, Swift, Objective-C, Java) | Intermediate - Ruby, C/C++, JS, Typescript ML: Clustering(HDBSCAN, UMAP), Topic Modeling (BERTopic), Community-detection (Graphs), Prompt Eng.(CoT) AI/ML Frameworks (Python): Pytorch, Tensorflow, Huggingface, LangChain, vLLM, Numpy, Pandas, Matplotlib, NetworkX, Scikit-Learn, Statsmodels, Spacy, cuML, Django, Flask, RESTful APIs, Multiprocessing, Celery Models: Transformers (RoBERTa), LLM (LLaMa 3), CLIP, Vision models (e.g., SAM). [Model finetuning/training] Cloud & Databases: AWS, GCP, Docker, MongoDB, Postgresql, Vector-DB (qdrant), RAG. [Git, LaTeX]