

# Aochong (Oliver) Li

(917) 945-9173 | [al2644@cornell.edu](mailto:al2644@cornell.edu) | <https://aochong-li.github.io/>

## EDUCATION

### Cornell University

Ph.D. in Computer Science; Advisor: Tanya Goyal

Ithaca, NY

Sep. 2024 – Present

### Columbia University in the City of New York

B.A. in Computer Science and Mathematics; Advisor: Zhou Yu

• GPA: 4.09/4.0; Honors: Summa Cum Laude

New York, NY

Aug. 2020 – May 2023

## SUMMARY

I left my quant research job on Wall Street to work on AI and LLMs. My current focus is on advancing **small model reasoning abilities** and building models that can **self-evolve with the world's changing knowledge**. I recently co-founded OpenDive.ai with fellow Cornell PhDs, a startup dedicated to open-sourcing codebases from industry research papers. I believe democratizing technologies on our way to AGI is on the right side of history.

## PUBLICATIONS

- *Benchmarking and Improving Conflicting New Knowledge Acquisition during Continued Pre-training* (ACL 2025 under submission)  
**Oliver Li**, Tanya Goyal
- *NormDial: A Comparable Bilingual Synthetic Dialog Dataset For Modeling Social Norm Adherence and Violation* (EMNLP 2023)  
**Oliver Li**, Mallika Subramanian, Arkadiy Saakyan, Sky CH-Wang, Smaranda Muresan
- *Sociocultural Norm Similarities and Differences via Situational Alignment and Explainable Textual Entailment* (EMNLP 2023)  
Sky CH-Wang\*, Arkadiy Saakyan\*, **Oliver Li**, Zhou Yu, Smaranda Muresan.
- *Affective Idiosyncratic Responses to Music* (EMNLP 2022)  
Sky CH-Wang, Evan Li, **Oliver Li**, Smaranda Muresan, Zhou Yu

## RESEARCH EXPERIENCE

### LLMs' Memory Updates with New Knowledge

Graduate Researcher | Advisor: Tanya Goyal

New York, NY

Sep. 2024 – Feb. 2025

- Built **Knowledge Update Playground** (KUP), a framework to synthesize realistic news corpora that contradict LLMs' internal knowledge; evaluated LLMs' knowledge adaptability using direct and indirect probing
- Introduced **Memory Recall**, a train-and-test-time method that outperforms baselines on our benchmark; analyzed memory recall behaviors, showing that models are better at retrieving high-level knowledge than low-level details

### LLM Alignment with Social Norms

Undergraduate Researcher | Advisor: Zhou Yu, Smaranda Muresan

New York, NY

Mar. 2022 – Jul. 2023

- Led research in curating **NormDial**, the first AI multicultural social norm alignment benchmark, and evaluated LLMs' abilities to follow social norms in multi-turn, multicultural QA settings
- Collaborated on a project to quantify cross-cultural social norm differences at a large scale; fine-tuned a series of T-5 models for social norm alignment and improved their reasoning abilities in cross-cultural conflict situations

## INDUSTRY EXPERIENCE

### AQR Capital Management

Quantitative Researcher

Greenwich, CT

Jul. 2023 – Aug. 2024

- Developed several high Sharpe (~2.0) systematic signals with large-scale proprietary datasets (e.g., company patent, news, earnings call, broker reports, etc.); backtested these strategies and deployed them into production
- Prototyped and pre-trained a transformer-based model that used raw signals to predict monthly returns of global equities, achieving 8%+ alpha ( $p < 0.05$ ) compared to prior in-house model baselines in backtest

## SKILLS

**Programming Languages:** Python, Java, C, SQL, R, Go, Shell, Bash, Unix/Linux