# Tianle Li

My interests are training large models, building more capable and reliable AI, and solving superintelligence.

#### **EDUCATION**

# UNIVERSITY OF CALIFORNIA, BERKELEY

Berkeley, CA

## B.S. Electrical Engineering and Computer Science; GPA: 3.7

2021-2025

Data Structure, Algorithms, Computer Architecture, Convex Optimization, Machine Learning, Deep Neural Networks, Deep Reinforcement Learning, Natural Language Processing.

Advisor: Ion Stoica

#### **EXPERIENCE**

**xAI** PALO ALTO, CA

## **Member of Technical Staff**

May 2025 - Present

- AI Researcher & Engineer: Grok 3.5 post-training.
- Creating generalizable reward models and developing novel reinforcement learning algorithms.
- Improving data mixtures by building data collection pipelines and developing data generation techniques.
- Designing and implementing large-scale model training frameworks.
- Collaborating with pre-training, reasoning, multimodal, applied, product efforts to push the frontiers of model capability.

# BERKELEY SKY COMPUTING LAB

BERKELEY, CA

# **Undergrad Researcher**

July 2023 - May 2025

Chatbot Arena (Core Contributor)

- An open platform for evaluating LLMs by human preference with millions of monthly users.
- We privately tested GPT-40, Grok 3, Gemini Flash and Pro, Meta Llama 3.2, and more.
- I lead research on human preference and data pipeline / analysis.
- I built the categories: Hard Prompt, Style Control, Instruction-Following, Math, Creative Writing, and more.
- I'm advising ongoing projects including Search Arena, PDFChat, User leaderboard, and more.

**NexusFlow** PALO ALTO, CA

## **Machine Learning Engineer**

May 2024 - May 2025

Athene-V2-Chat-72B: co-trained the best open weight LLM; post-trained from Qwen 2.5-72b-chat.

On par with GPT-40 and Claude 3.5 Sonnet on Chatbot Arena (Rank 5), surpass GPT-40 and Llama-3.1-405B on LiveCodeBench, Aider, GPQA, MATH, and more (Nov 2024).

Athene-70B: co-trained the best open weight chat LLM post-trained using Llama-3-70b base model.

- Rank 8 on Chatbot Arena Overall, Rank 5 on Chatbot Arena Hard Prompt (July 2024).
- I co-trained the 70B reward model for aligning Athene using PPO using 32 H100 GPUs.
- I led data curation and evaluation, successfully improved Llama-3 on technical and multilingual queries.

Starling-LM-7B-beta: the world's best 7B chat LLM post-trained from OpenChat.

• Best 7B model on Chatbot Arena, on par with Llama-2-70B and Vicuna-33B (Nov 2023). I led the evaluation part.

MOUNTAIN VIEW, CA **Student Researcher** FEB 2025 - May 2025

• Improve reasoning in LLMs. Our evaluation method was published in NAACL.

**AMD** San Jose, CA

# Software Development Intern

GOOGLE AI

May 2023 - August 2023

• Built Xilinx's Digital Signal Processing library.

### SELECTED PUBLICATION (Google Scholar)

- 1. From Crowdsourced Data to High-Quality Benchmarks: Arena-Hard and BenchBuilder (ICML 2025)
  Tianle Li\*, Wei-Lin Chiang\*, Evan Frick, Lisa Dunlap, Tianhao Wu, Banghua Zhu, Joseph E. Gonzalez, Ion Stoica.
- 2. Prompt-to-Leaderboard (ICML 2025)

Evan Frick\*, Connor Chen\*, Joseph Tennyson\*, Tianle Li\*, Wei-Lin Chiang\*, Anastasios N. Angelopoulos\*, Ion Stoica.

3. How to Evaluate Reward Models for RLHF (ICLR 2025)

Evan Frick, **Tianle Li**, Connor Chen, Wei-Lin Chiang, Anastasios N. Angelopoulos, Jiantao Jiao, Banghua Zhu, Joseph E. Gonzalez, Ion Stoica.

4. Chatbot Arena: An Open Platform for Evaluating LLMs by Human Preference (ICML 2024)

Wei-Lin\* Chiang, Lianmin\* Zheng, Ying Sheng, Anastasios Nikolas Angelopoulos, **Tianle Li**, Dacheng Li, Banghua Zhu, Hao Zhang, Michael Jordan, Joseph E. Gonzalez, Ion Stoica.

LMSYS-Chat-1M: A Large-Scale Real-World LLM Conversation Dataset (ICLR 2024 Spotlight)
 Lianmin Zheng\*, Wei-Lin Chiang\*, Ying Sheng, Tianle Li, Siyuan Zhuang, Zhanghao Wu, Yonghao Zhuang, Zhuohan Li, Zi Lin, Eric Xing, Joseph E. Gonzalez, Ion Stoica, Hao Zhang.

Project MPG: towards a generalized performance benchmark for LLM capabilities (NAACL 2025)
 Lucas Spangher, Tianle Li, William F. Arnold, Nick Masiewicki, Xerxes Dotiwalla, Rama Parusmathi, Peter Grabowski, Eugene Ie, Dan Gruhl.

#### **TECHNICAL BLOG**

1. Chatbot Arena Categories: Definitions, Methods, and Insights

Tianle Li, Wei-Lin Chiang, Yifan Song, Naman Jain, Lisa Dunlap, Dacheng Li, Evan Frick, Anastasios N. Angelopoulos.

2. Does Style Matter? Disentangling style and substance in Chatbot Arena

Tianle Li\*, Anastasios Angelopoulos\*, Wei-Lin Chiang\*.

3. Athene-70B: Redefining the Boundaries of Post-Training for Open Models

Evan Frick\*, Peter Jin\*, Tianle Li\*, Karthik Ganesan, Jian Zhang, Jiantao Jiao, Banghua Zhu.

4. Introducing Hard Prompts Category in Chatbot Arena

Tianle Li, Wei-Lin Chiang, Lisa Dunlap.

5. What's up with Llama 3? Arena data analysis

Lisa Dunlap, Evan Frick, Tianle Li, Isaac Ong, Joseph E. Gonzalez, Wei-Lin Chiang.

6. Chatbot Arena: New models & Elo system update

Wei-Lin Chiang, Tianle Li, Joseph E. Gonzalez, Ion Stoica.

7. Introducing Athene-V2: Advancing Beyond the Limits of Scaling with Targeted Post-training
The Nexusflow Team.

## **OPEN SOURCE PROJECT**

1. FastChat (Contributor)

38K+ Stars

An open infra for training, serving, and evaluating large language models. Release repo for Vicuna and Chatbot Arena.

2. Arena-Hard-Auto (Lead)

800+ Stars

An automatic evaluation tool for instruction-tuned LLMs, highly correlated with Chatbot Arena.

#### **TEACHING**

### **EECS 127: Convex Optimization for Machine Learning**

UC BERKELEY

### **Teaching Assistant**

September 2023 - May 2024

This upper division course offers the theories behind optimization models and their applications, ranging from machine learning and statistics to decision-making and control, with emphasis on numerically tractable problems, such as linear, quadratic, conic, or constrained least-squares optimization.

<sup>\*</sup> means equal contribution.

# PERSONAL PROJECT

# **Speaking in Chess**

https://github.com/CodingWithTim/Speaking in Chess

- Pretrained and supervised fine-tuned GPT-2 128M on over 20 million chess games using a custom chess tokenizer.
- Evaluated 6 RL strategies, including 3 novel algorithms: Fictitious Self-Play, Past-Present Q-Iteration, Funnel Searching.
- Achieve over 95% draw rate against StockFish 3000 elo chess engine with gameplay accuracy averaging 90%.

<sup>\*</sup> means equal contribution.