# Kaiyu Yang

Research Scientist @ Meta FAIR **734-389-9696** ⋈ kaiyuy@meta.com https://yangky11.github.io

## PROFESSIONAL APPOINTMENTS

Meta Fundamental AI Research (FAIR)

New York, NY 6/2024 - Present

Research Scientist

California Institute of Technology

Computing, Data, and Society Postdoctoral Fellow

Pasadena, CA 9/2022 - 5/2024

Advisors: Pietro Perona and Yisong Yue

**EDUCATION** 

**Princeton University** Princeton, NJ

Ph.D. in Computer Science 7/2022

Advisor: Jia Deng

University of Michigan Ann Arbor, MI

M.S. in Computer Science and Engineering 8/2018

Tsinghua University Beijing, China

B.Eng. in Computer Science 7/20167/2016

B.S. in Mathematics and Applied Mathematics

## RESEARCH INTERESTS

AI · Machine Learning · LLMs for Theorem Proving and Mathematical Reasoning

## **PUBLICATIONS**

Preprint Goedel-Prover: A Frontier Model for Open-Source Automated Theorem Proving

Yong Lin\*, Shange Tang\*, Bohan Lyu, Jiayun Wu, Hongzhou Lin, Kaiyu Yang, Jia Li,

Mengzhou Xia, Danqi Chen, Sanjeev Arora, Chi Jin.

Technical report, 2025

Preprint PyEuclid: A Versatile Formal Plane Geometry System in Python

Zhaoyu Li\*, Hangrui Bi\*, Jialiang Sun\*, Zenan Li, Kaiyu Yang, Xujie Si.

In submission, 2025

Preprint Spectral Journey: How Transformers Predict the Shortest Path

Andrew Cohen, Andrey Gromov, Kaiyu Yang, Yuandong Tian.

In submission, 2025

<sup>\*</sup> Equal contribution. † Equal advising

#### Preprint Formal Mathematical Reasoning: A New Frontier in AI

<u>Kaiyu Yang,</u> Gabriel Poesia, Jingxuan He, Wenda Li, Kristin Lauter, Swarat Chaudhuri,

Dawn Song.

In submission, 2025

#### Preprint Towards Large Language Models as Copilots for Theorem Proving in Lean

Peiyang Song, Kaiyu Yang, Anima Anandkumar.

In submission, 2025

#### ICLR 2025 Proving Olympiad Inequalities by Synergizing LLMs and Symbolic Reasoning

Zenan Li\*, Zhaoyu Li\*, Wen Tang, Xian Zhang, Yuan Yao, Xujie Si, Fan Yang, <u>Kaiyu Yang</u>†, Xiaoxing Ma†.

International Conference on Learning Representations, 2025

## NeurIPS 2024 SciInstruct: A Self-Reflective Instruction Annotated Dataset

for Training Scientific Language Models

Dan Zhang, Ziniu Hu, Sining Zhoubian, Zhengxiao Du,  $\underline{\text{Kaiyu Yang}}$ , Zihan Wang, Yisong

Yue, Yuxiao Dong, Jie Tang.

Neural Information Processing Systems (NeurIPS), 2024

## COLM 2024 A Survey on Deep Learning for Theorem Proving

Zhaoyu Li, Jialiang Sun, Logan Murphy, Qidong Su, Zenan Li, Xian Zhang, Kaiyu Yang,

Xujie Si.

Conference on Language Modeling (COLM), 2024

#### ICML 2024 Autoformalizing Euclidean Geometry

Logan Murphy\*, Kaiyu Yang\*, Jialiang Sun, Zhaoyu Li, Anima Anandkumar, Xujie Si.

International Conference on Machine Learning (ICML), 2024

#### NeurIPS 2023 LeanDojo: Theorem Proving with Retrieval-Augmented Language Models

 $\underline{\text{Kaiyu Yang}},$  Aidan Swope, Alex Gu, Rahul Chalamala, Peiyang Song, Shixing Yu, Saad

Godil, Ryan Prenger, Anima Anandkumar.

Neural Information Processing Systems (NeurIPS), 2023, Oral presentation

#### CVPR 2023 Infinite Photorealistic Worlds using Procedural Generation

Alexander Raistrick\*, Lahav Lipson\*, Zeyu Ma\*, Lingjie Mei, Mingzhe Wang, Yiming Zuo, Karhan Kayan, Hongyu Wen, Beining Han, Yihan Wang, Alejandro Newell, Hei Law, Ankit

Goyal, Kaiyu Yang, Jia Deng.

Conference on Computer Vision and Pattern Recognition (CVPR), 2023

#### TMLR 2023 Learning Symbolic Rules for Reasoning in Quasi-Natural Language

Kaiyu Yang and Jia Deng.

Transactions on Machine Learning Research (TMLR), 2023

#### EMNLP 2022 Generating Natural Language Proofs with Verifier-Guided Search

Kaiyu Yang, Jia Deng, Danqi Chen.

Empirical Methods in Natural Language Processing (EMNLP), 2022, Oral presentation

#### ICML 2022 A Study of Face Obfuscation in ImageNet

Kaiyu Yang, Jacqueline Yau, Li Fei-Fei, Jia Deng, Olga Russakovsky.

International Conference on Machine Learning (ICML), 2022

NeurIPS 2020	Strongly Incremental Constituency Parsing with Graph Neural Networks		
	Kaiyu Yang and Jia Deng.  Neural Information Processing Systems (NeurIPS), 2020		
NeurIPS 2020	Rel3D: A Minimally Contrastive Benchmark for Grounding Spatial Relations in 3D		
	Ankit Goyal, <u>Kaiyu Yang</u> , Dawei Yang, Jia Deng.  Neural Information Processing Systems (NeurIPS), 2020, <b>Spotlight presentation</b>		
FAT* 2020	Towards Fairer Datasets: Filtering and Balancing the Distribution of the People Subtree in the ImageNet Hierarchy		
	<u>Kaiyu Yang</u> , Klint Qinami, Li Fei-Fei, Jia Deng, Olga Russakovsky. <u>Conference on Fairness</u> , Accountability, and Transparency (FAT*), 2020		
ICML 2019	Learning to Prove Theorems via Interacting with Proof Assistants		
	Kaiyu Yang and Jia Deng.  International Conference on Machine Learning (ICML), 2019		
ICCV 2019	SpatialSense: An Adversarially Crowdsourced Benchmark for Spatial Relation Recognition		
	Kaiyu Yang, Olga Russakovsky, Jia Deng.  International Conference on Computer Vision (ICCV), 2019		
ECCV 2016	Stacked Hourglass Networks for Human Pose Estimation		
	Alejandro Newell, <u>Kaiyu Yang</u> , Jia Deng. European Conference on Computer Vision (ECCV), 2016		
<u>AWARI</u>	OS AND GRANTS		
-	abolic AI for Autonomy	2023	
Co-au Siebel Scl	thored proposal awarded by Caltech's Center for Autonomous Systems and Technologie h <b>olar</b>	2022	
42 computer science graduate students awarded annually from selected institutions worlds			
Top 20% at the Conference on Computer Vision and Pattern Recognition (CVPR)			
_	loud Research Credits  - Cloud Platform	2019	
Outstand	·	5, 2016	
MEDIA			
	ticians' Newest Assistants Are Artificially Intelligent	2024	
Can LLM	ific American Is Generate Mathematical Proofs that can be Rigorously Checked? TechPost	2023	
Exploring the Tradeoff Between Privacy and Algorithm Performance  2022  Princeton Insights			
Researchers Devise Approach to Reduce Biases in Computer Vision Data Sets 2020			
	sed. Here's How Scientists Are Trying to Fix It	2019	

## **INVITED TALKS**

Towards an AI Mathematician  Brown University of California, Los Angeles  University of California, Los Angeles  University of Chicago  FAIR, Meta AI  University of Texas, Austin  Towards Large Language Models as Copilots for Theorem Proving  Lean Together Annual Meeting  Lean Together Annual Meeting  Lean Together Annual Meeting  Lean For the Curious Mathematician Colloquium  Meural Information Processing Systems (NeurIPS) Oral Presentation  Stanford Software Research Lunch  Conference on Artificial Intelligence and Theorem Proving (AITP)  Bloskinson Center for Formal Mathematics, CMU  Rutgers University of California, Los Angeles  University of California, Los Angeles  University of California, Santa Barbara  University of California, Santa Barbara  University of Southern California  Blost: Lei Li, 11/2022  Teaching Machines to Reason Symbolically  OpenAI  Google  University of Pennsylvania  NSF "Understanding the World Through Code" Program  Generating Natural Language Proofs with Verifier-Guided Search  N2Formal Group, Google  RESEARCH MENTORING  RESEARCH MENTORING  Zhaoyu Li  PhD student @ University of Teronto  Jiacheng Chen  Undersymduate & South China University of Technology  Peiyang Song  Undersymduate & Collech → Researcher @ Together AI  Shixing Yu  Master's student & UT' Austin → Ph.D. student & Cornell  Gene Chou  Undersymduate & Princeton → Ph.D. student & Cornell  Gene Chou  Undersymduate & Princeton → Ph.D. student & Cornell  Gene Chou  Undersymduate & Princeton → Ph.D. student & Cornell  Gene Chou  Undersymduate & Princeton → Ph.D. student & Cornell  Gene Chou  Undersymduate & Princeton → Ph.D. student & Cornell  Jacquelline Yau  Master's student & Stanford → Ph.D. student & UIUC		
University of California, Los Angeles University of Chicago FAIR, Meta AI University of Texas, Austin Host: Kristin Lauter, 4/2024 Host: Kristin Lauter, 4/2024 University of Texas, Austin Host: Swarat Chaudhuri, 3/2024 Towards Large Language Models as Copilots for Theorem Proving Lean Together Annual Meeting Theorem Proving via Machine Learning Lean for the Curious Mathematician Colloquium LeanDojo: Theorem Proving with Retrieval-Augmented Language Models Neural Information Processing Systems (NeurIPS) Oral Presentation Stanford Software Research Lunch Conference on Artificial Intelligence and Theorem Proving (AITP) Hoskinson Center for Formal Mathematics, CMU Rutgers University Host: Jeremy Avigad, 5/2023 Rutgers University of California, Los Angeles University of California, Santa Barbara University of California, Santa Barbara Host: Guy Van den Broeck, 2/2023 University of Southern California Host: Xiang Ren, 10/2022 University of Pennsylvania Host: Wayur Naik, 2/2022 University of Pennsylvania Feaching Machines to Reason Symbolically OpenAI Google University of Pennsylvania NSF "Understanding the World Through Code" Program Host: Mayur Naik, 2/2022 University of Pennsylvania NSF "Understanding the World Through Code" Program Host: Markus Rabe, 7/2022  RESEARCH MENTORING  Zhaoyu Li PhD student @ University of Toronto Jiacheng Chen Undergraduate @ Ocaltech → Researcher @ Together AI Shixing Yu Muster's student @ UT Austin → Ph.D. student @ Cornell Gene Chou Undergraduate @ Valench → Ph.D. student @ Cornell Gene Chou Undergraduate @ Princeton → Ph.D. student @ Cornell Gene Chou Undergraduate @ Princeton → Ph.D. student @ Cornell	Towards an AI Mathematician	
University of Chicago Host: Kristin Lauter, $4/2024$ FAIR, Meta AI Host: Kristin Chauter, $4/2024$ University of Texas, Austin Host: Swarat Chaudhuri, $3/2024$ Towards Large Language Models as Copilots for Theorem Proving Lean Together Annual Meeting 1/2024  Theorem Proving via Machine Learning Lean for the Curious Mathematician Colloquium 9/2023  LeanDojo: Theorem Proving with Retrieval-Augmented Language Models  Neural Information Processing Systems (NeurIPS) Oral Presentation 12/2023  Stanford Software Research Lunch 10/2023  Conference on Artificial Intelligence and Theorem Proving (AITP) 9/2023  Hoskinson Center for Formal Mathematics, CMU Host: Jeremy Avigad, $5/2023$ Rutgers University Host: Alex Kontorovich, $7/2023$ Neurosymbolic Reasoning, From Formal Logic to Natural Language  University of California, Los Angeles Host: Guy Van den Broeck, $2/2023$ University of California, Santa Barbara Host: Lei Li, $11/2022$ University of Southern California Host: Xiang Ren, $10/2022$ University of Southern California Host: Wayur Naik, $2/2022$ University of Pennsylvania Host: Mayur Naik, $2/2022$ University of Pennsylvania Host: Mayur Naik, $2/2022$ University of Pennsylvania Host: Swarat Chaudhuri, $1/2022$ Generating Natural Language Proofs with Verifier-Guided Search N2Formal Group, Google Host: Markus Rabe, $7/2022$ RESEARCH MENTORING  PhD student @ University of Toronto Host: Menton & 2024 - Present Undergraduate & South China University of Technology Peiyang Song 2023 - 2024 Undergraduate & Caltech $\rightarrow$ Researcher @ Together AI Shixing Yu Master's student & UT Austin $\rightarrow$ Ph. D. student & Cornell Gene Chou Undergraduate & Princeton $\rightarrow$ Ph. D. student & Cornell Gene Chou Undergraduate & Princeton $\rightarrow$ Ph. D. student & Cornell Gene Chou Undergraduate & Princeton $\rightarrow$ Ph. D. student & Cornell Gene Chou Undergraduate & Princeton $\rightarrow$ Ph. D. student & Cornell Gene Chou	Brown University	Host: Robert Lewis, 9/2024
FAIR, Meta AI University of Texas, Austin Host: Swarat Chaudhuri, 3/2024 Towards Large Language Models as Copilots for Theorem Proving Lean Together Annual Meeting 1/2024 Theorem Proving via Machine Learning Lean for the Curious Mathematician Colloquium 9/2023 LeanDojo: Theorem Proving with Retrieval-Augmented Language Models Neural Information Processing Systems (NeurIPS) Oral Presentation 12/2023 Stanford Software Research Lunch Conference on Artificial Intelligence and Theorem Proving (AITP) Hoskinson Center for Formal Mathematics, CMU Host: Jeremy Avigad, 5/2023 Rutgers University Host: Alex Kontorovich, 7/2023 Neurosymbolic Reasoning, From Formal Logic to Natural Language University of California, Los Angeles University of California, Santa Barbara Host: Ci Li, 11/2022 University of Southern California Host: Xiang Ren, 10/2023 Teaching Machines to Reason Symbolically OpenAI Google Host: Denny Zhou, 2/2022 University of Pennsylvania Host: Mayur Naik, 2/2022 University of Pennsylvania Host: Swarat Chaudhuri, 1/2022 University of Pennsylvania Host: Mayur Naik, 2/2022 Host: Mayur Naik, 2/2022 University of Pennsylvania Host: Swarat Chaudhuri, 1/2022 Generating Natural Language Proofs with Verifier-Guided Search N2Formal Group, Google Host: Markus Rabe, 7/2022  RESEARCH MENTORING  RESEARCH MENTORING  Research @ University of Technology Pelayang Song Undergraduate @ University of Technology Pelayang Song Undergraduate @ Caltech → Researcher @ Together AI Shixing Yu Master's student @ UT Austin → Ph.D. student @ Cornell Gene Chou Undergraduate @ Princeton → Ph.D. student @ Cornell Gene Chou Undergraduate @ Princeton → Ph.D. student @ Cornell Gene Chou Undergraduate @ Princeton → Ph.D. student @ Cornell	University of California, Los Angeles	5/2024
University of Texas, Austin Host: Swarat Chaudhuri, 3/2024 Towards Large Language Models as Copilots for Theorem Proving Lean Together Annual Meeting 1/2024 Theorem Proving via Machine Learning Lean for the Curious Mathematician Colloquium 9/2023 LeanDojo: Theorem Proving with Retrieval-Augmented Language Models Neural Information Processing Systems (NeurIPS) Oral Presentation 12/2023 Stanford Software Research Lunch 10/2023 Conference on Artificial Intelligence and Theorem Proving (AITP) 9/2023 Hoskinson Center for Formal Mathematics, CMU Host: Jeremy Avigad, 5/2023 Rutgers University Host: Alex Kontorovich, 7/2023 Neurosymbolic Reasoning, From Formal Logic to Natural Language University of California, Los Angeles Host: Guy Van den Broeck, 2/2023 University of California, Santa Barbara Host: Lei Li, 11/2022 University of Southern California Host: Xiang Ren, 10/2023 Teaching Machines to Reason Symbolically OpenAI 3/2022 Google Host: Denny Zhou, 2/2022 University of Pennsylvania Host: Swarat Chaudhuri, 1/2022 University of Pennsylvania Host: Swarat Chaudhuri, 1/2022 Generating Natural Language Proofs with Verifier-Guided Search N2Formal Group, Google Host: Markus Rabe, 7/2022  RESEARCH MENTORING  RESEARCH MENTORING  RESEARCH MENTORING  RESEARCH MENTORING  RESEARCH MENTORING  Research © Technology Peisyang Song Undergraduate © Caltech → Researcher © Together AI Shixing Yu Master's student © UT Austin → Ph.D. student © Cornell Gene Chou Undergraduate © Princeton → Ph.D. student © Cornell Gene Chou Undergraduate © Princeton → Ph.D. student © Cornell Gene Chou Undergraduate © Princeton → Ph.D. student © Cornell Gene Chou Undergraduate © Princeton → Ph.D. student © Cornell Gene Chou	University of Chicago	Host: Haifeng Xu, 4/2024
Towards Large Language Models as Copilots for Theorem Proving  Lean Together Annual Meeting  Theorem Proving via Machine Learning  Lean for the Curious Mathematician Colloquium  Jean Dojo: Theorem Proving with Retrieval-Augmented Language Models  Neural Information Processing Systems (NeurIPS) Oral Presentation  Stanford Software Research Lunch  Conference on Artificial Intelligence and Theorem Proving (AITP)  Hoskinson Center for Formal Mathematics, CMU  Host: Jeremy Avigad, 5/2023  Rutgers University  Host: Alex Kontorovich, 7/2023  Rutgers University of California, Los Angeles  University of California, Los Angeles  University of California, Santa Barbara  University of Southern California  Host: Guy Van den Broeck, 2/2023  University of Southern California  Host: Sury Van den Broeck, 2/2023  University of Southern California  Faching Machines to Reason Symbolically  OpenAI  Google  University of Pennsylvania  Host: Denny Zhou, 2/2022  University of Pennsylvania  NSF "Understanding the World Through Code" Program  Host: Swarat Chaudhuri, 1/2022  Generating Natural Language Proofs with Verifier-Guided Search  N2Formal Group, Google  RESEARCH MENTORING  Zhaoyu Li  phD student @ University of Toronto  Jiacheng Chen  Undergraduated @ South China University of Technology  Peisyang Song  Undergraduate @ UCSB → Undergraduate @ Caltech  Rahul Chalamala  Undergraduate @ Caltech → Researcher @ Together AI  Shixing Yu  Master's student @ UT Austin → Ph.D. student @ Cornell  Gene Chou  Undergraduate @ Princeton → Ph.D. student @ Cornell  Gene Chou  Undergraduate @ Princeton → Ph.D. student @ Cornell  Gene Chou  Undergraduate @ Princeton → Ph.D. student @ Cornell  Jacqueline Yau  2019 −2020	FAIR, Meta AI	Host: Kristin Lauter, 4/2024
Lean Together Annual Meeting  Theorem Proving via Machine Learning  Lean for the Curious Mathematician Colloquium  Po2023  Lean For the Curious Mathematician Colloquium  Po2024  Lean For the Curious Mathematician Colloquium  Neural Information Processing Systems (NeurIPS) Oral Presentation  Stanford Software Research Lunch  Conference on Artificial Intelligence and Theorem Proving (AITP)  Hoskinson Center for Formal Mathematics, CMU  Rutgers University  Host: Alex Kontorovich, 7/2023  Neurosymbolic Reasoning, From Formal Logic to Natural Language  University of California, Los Angeles  University of California, Santa Barbara  University of Southern California  Host: Kiang Ren, 10/2022  Host: Guy Van den Broeck, 2/2023  University of Southern California  Host: Xiang Ren, 10/2022  Host: Denny Zhou, 2/2022  University of Pennsylvania  Host: Denny Zhou, 2/2022  University of Pennsylvania  NSF "Understanding the World Through Code" Program  Host: Swarat Chaudhuri, 1/2022  Generating Natural Language Proofs with Verifier-Guided Search  N2Formal Group, Google  Host: Markus Rabe, 7/2022  RESEARCH MENTORING  Zhaoyu Li  PhD student @ University of Toronto  Jiacheng Chen  Undergraduate @ South China University of Technology  Poiyang Song  Undergraduate @ UCSB → Undergraduate @ Caltech  Rabul Chalamala  Undergraduate @ Caltech → Researcher @ Together AI  Shixing Yu  Master's student @ UT Austin → Ph.D. student @ Cornell  Gene Chou  Undergraduate @ Princeton → Ph.D. student @ Cornell  Gene Chou  Undergraduate @ Princeton → Ph.D. student @ Cornell  Jacqueline Yau  2019 − 2020	University of Texas, Austin	Host: Swarat Chaudhuri, 3/2024
Theorem Proving via Machine Learning  Lean for the Curious Mathematician Colloquium  Pologo Theorem Proving with Retrieval-Augmented Language Models  Neural Information Processing Systems (NeurIPS) Oral Presentation  Neural Information Processing Systems (NeurIPS) Oral Presentation  Stanford Software Research Lunch  Conference on Artificial Intelligence and Theorem Proving (AITP)  Hoskinson Center for Formal Mathematics, CMU  Rutgers University  Host: Alex Kontorovich, 7/2023  Neurosymbolic Reasoning, From Formal Logic to Natural Language  University of California, Los Angeles  University of California, Santa Barbara  Host: Guy Van den Broeck, 2/2023  University of Southern California  Host: Xiang Ren, 10/2022  Teaching Machines to Reason Symbolically  OpenAI  Google  Host: Denny Zhou, 2/2022  University of Pennsylvania  Host: Denny Zhou, 2/2022  University of Pennsylvania  NSF "Understanding the World Through Code" Program  Host: Swarat Chaudhuri, 1/2022  Generating Natural Language Proofs with Verifier-Guided Search  N2Formal Group, Google  Host: Markus Rabe, 7/2022  RESEARCH MENTORING  Zhaoyu Li  PhD student @ University of Toronto  Jiacheng Chen  Undergraduate @ South China University of Technology  Peiyang Song  Undergraduate @ South China University of Technology  Peiyang Song  Undergraduate @ Caltech $\rightarrow$ Researcher @ Together AI  Shixing Yu  Master's student @ UT Austin $\rightarrow$ Ph.D. student @ Cornell  Gene Chou  Undergraduate @ Princeton $\rightarrow$ Ph.D. student @ Cornell  Gene Chou  Undergraduate @ Princeton $\rightarrow$ Ph.D. student @ Cornell  Jacqueline Yau  2019 $\rightarrow$ 2021	Towards Large Language Models as Copilots for Theorem	Proving
Lean for the Curious Mathematician Colloquium    Polyage   Polyag	Lean Together Annual Meeting	1/2024
LeanDojo: Theorem Proving with Retrieval-Augmented Language Models         Neural Information Processing Systems (NeurIPS) Oral Presentation       12/2023         Stanford Software Research Lunch       10/2023         Conference on Artificial Intelligence and Theorem Proving (AITP)       9/2023         Hoskinson Center for Formal Mathematics, CMU       Host: Jeremy Avigad, 5/2023         Rutgers University       Host: Alex Kontorovich, 7/2023         Neurosymbolic Reasoning, From Formal Logic to Natural Language       Host: Alex Kontorovich, 7/2023         University of California, Los Angeles       Host: Guy Van den Broeck, 2/2023         University of California, Santa Barbara       Host: Guy Van den Broeck, 2/2023         University of Southern California       Host: Guy Van den Broeck, 2/2022         Google       Host: Was Ren, 10/2022         University of Southern California       Host: Sun Ren, 10/2022         University of Pennsylvania       Host: Denny Zhou, 2/2022         University of Pennsylvania       Host: Swarat Chaudhuri, 1/2022         Generating Natural Language Proofs with Verifier-Guided Search       N2Formal Group, Google       Host: Markus Rabe, 7/2022         RESEARCH MENTORING         Zhaoyu Li       2025 - Present       2024 - Present         PhD student @ University of Toronto       2024 - Present       2024 - Present     <	Theorem Proving via Machine Learning	
Neural Information Processing Systems (NeurIPS) Oral Presentation 12/2023 Stanford Software Research Lunch 10/2023 Conference on Artificial Intelligence and Theorem Proving (AITP) 9/2023 Hoskinson Center for Formal Mathematics, CMU Host: Jeremy Avigad, $5/2023$ Rutgers University Host: Alex Kontorovich, $7/2023$ Rutgers University of California, Los Angeles Host: Alex Kontorovich, $7/2023$ University of California, Los Angeles Host: Guy Van den Broeck, $2/2023$ University of California, Santa Barbara Host: Lei Li, $11/2022$ University of Southern California Host: Xiang Ren, $10/2022$ Geaching Machines to Reason Symbolically OpenAI 3/2022 Google Host: Denny Zhou, $2/2022$ University of Pennsylvania Host: Mayur Naik, $2/2022$ NSF "Understanding the World Through Code" Program Host: Swarat Chaudhuri, $1/2022$ Generating Natural Language Proofs with Verifier-Guided Search N2Formal Group, Google Host: Markus Rabe, $7/2022$ RESEARCH MENTORING  RESEARCH MENTORING  RESEARCH WENTORING  Respectively of Toronto Juniversity of Technology Peiyang Song Undergraduate & Ucts Description Undergraduate & Ucts Description Undergraduate & Ucts Description Undergraduate & Ucts Description Undergraduate & Caltech Rahul Chalamala Undergraduate & Caltech Presearcher & Together AI Shixing Yu 2022 – 2023 Master's student & Ut Austin $\rightarrow$ Ph.D. student & Cornell Gene Chou Undergraduate & Princeton $\rightarrow$ Ph.D. student & Cornell Gene Chou Undergraduate & Princeton $\rightarrow$ Ph.D. student & Cornell Gene Chou Undergraduate & Princeton $\rightarrow$ Ph.D. student & Cornell Gene Chou Undergraduate & Princeton $\rightarrow$ Ph.D. student & Cornell Gene Chou Undergraduate & Princeton $\rightarrow$ Ph.D. student & Cornell	Lean for the Curious Mathematician Colloquium	9/2023
Stanford Software Research Lunch 10/2023 Conference on Artificial Intelligence and Theorem Proving (AITP) 9/2023 Rusgers University Host: Jeremy Avigad, 5/2023 Rutgers University Host: Alex Kontorovich, 7/2023 Neurosymbolic Reasoning, From Formal Logic to Natural Language University of California, Los Angeles Host: Guy Van den Broeck, 2/2023 University of California, Santa Barbara Host: Lei Li, 11/2022 University of Southern California Host: Xiang Ren, 10/2022 Teaching Machines to Reason Symbolically OpenAI 3/2022 Google Host: Denny Zhou, 2/2022 University of Pennsylvania Host: Mayur Naik, 2/2022 NSF "Understanding the World Through Code" Program Host: Swarat Chaudhuri, 1/2022 Generating Natural Language Proofs with Verifier-Guided Search N2Formal Group, Google Host: Markus Rabe, 7/2022  RESEARCH MENTORING  RESEARCH WENTORING  Zhaoyu Li PhD student @ University of Toronto Jiacheng Chen Undergraduate @ South China University of Technology Peiyang Song Undergraduate @ UCSB $\rightarrow$ Undergraduate @ Caltech Rahul Chalamala Undergraduate @ Caltech $\rightarrow$ Researcher @ Together AI Shixing Yu 2023 – 2024 Master's student @ UT Austin $\rightarrow$ Ph.D. student @ Cornell Gene Chou Undergraduate @ Princeton $\rightarrow$ Ph.D. student @ Cornell Jacqueline Yau 2019 – 2020	LeanDojo: Theorem Proving with Retrieval-Augmented La	anguage Models
Stanford Software Research Lunch 10/2023 Conference on Artificial Intelligence and Theorem Proving (AITP) 9/2023 Rusgers University Host: Jeremy Avigad, 5/2023 Rutgers University Host: Alex Kontorovich, 7/2023 Neurosymbolic Reasoning, From Formal Logic to Natural Language University of California, Los Angeles Host: Guy Van den Broeck, 2/2023 University of California, Santa Barbara Host: Lei Li, 11/2022 University of Southern California Host: Xiang Ren, 10/2022 Teaching Machines to Reason Symbolically OpenAI 3/2022 Google Host: Denny Zhou, 2/2022 University of Pennsylvania Host: Mayur Naik, 2/2022 NSF "Understanding the World Through Code" Program Host: Swarat Chaudhuri, 1/2022 Generating Natural Language Proofs with Verifier-Guided Search N2Formal Group, Google Host: Markus Rabe, 7/2022  RESEARCH MENTORING  RESEARCH WENTORING  Zhaoyu Li PhD student @ University of Toronto Jiacheng Chen Undergraduate @ South China University of Technology Peiyang Song Undergraduate @ UCSB $\rightarrow$ Undergraduate @ Caltech Rahul Chalamala Undergraduate @ Caltech $\rightarrow$ Researcher @ Together AI Shixing Yu 2023 – 2024 Master's student @ UT Austin $\rightarrow$ Ph.D. student @ Cornell Gene Chou Undergraduate @ Princeton $\rightarrow$ Ph.D. student @ Cornell Jacqueline Yau 2019 – 2020	Neural Information Processing Systems (NeurIPS) Oral Prese	entation $12/2023$
Conference on Artificial Intelligence and Theorem Proving (AITP) 9/2023 Hoskinson Center for Formal Mathematics, CMU Host: Jeremy Avigad, $5/2023$ Rutgers University Host: Alex Kontorovich, $7/2023$ Neurosymbolic Reasoning, From Formal Logic to Natural Language  University of California, Los Angeles Host: Guy Van den Broeck, $2/2023$ University of Southern California Host: Lei Li, $11/2022$ University of Southern California Host: Xiang Ren, $10/2022$ Teaching Machines to Reason Symbolically  OpenAI $3/2022$ Google Host: Denny Zhou, $2/2022$ University of Pennsylvania Host: Mayur Naik, $2/2022$ University of Pennsylvania Host: Swarat Chaudhuri, $1/2022$ SF "Understanding the World Through Code" Program Host: Swarat Chaudhuri, $1/2022$ Generating Natural Language Proofs with Verifier-Guided Search  N2Formal Group, Google Host: Markus Rabe, $7/2022$ RESEARCH MENTORING  Zhaoyu Li $2025 - Present$ PhD student @ University of Toronto  Jiacheng Chen $2024 - Present$ Undergraduate @ South China University of Technology  Peiyang Song $2023 - 2024$ Undergraduate @ UCSB $\rightarrow$ Undergraduate @ Caltech  Rahul Chalamala $2023$ Undergraduate @ Caltech $\rightarrow$ Researcher @ Together AI Shixing Yu $2022 - 2023$ Master's student @ UT Austin $\rightarrow$ Ph.D. student @ Cornell  Gene Chou $2024 - 2023$ Angeline Yau $2029 - 2024$	,	,
Hoskinson Center for Formal Mathematics, CMU Rutgers University Rutgers University Rutgers University  Neurosymbolic Reasoning, From Formal Logic to Natural Language  University of California, Los Angeles University of California, Santa Barbara University of Southern California Host: Lei Li, 11/2022  University of Southern California Host: Xiang Ren, 10/2022  Teaching Machines to Reason Symbolically OpenAI Google University of Pennsylvania NSF "Understanding the World Through Code" Program Host: Swarat Chaudhuri, 1/2022  Generating Natural Language Proofs with Verifier-Guided Search N2Formal Group, Google Host: Mayur Naik, 2/2022  RESEARCH MENTORING  Zhaoyu Li PhD student @ University of Toronto Jiacheng Chen Undergraduate @ South China University of Technology Peiyang Song Undergraduate @ South China University of Technology Peiyang Song Undergraduate @ UCSB → Undergraduate @ Caltech Rahul Chalamala Undergraduate @ Caltech → Researcher @ Together AI Shixing Yu Master's student @ UT Austin → Ph.D. student @ Cornell Gene Chou Undergraduate @ Princeton → Ph.D. student @ Cornell Jacqueline Yau 2019 − 2020 Junequaguate @ Princeton → Ph.D. student @ Cornell Jacqueline Yau 2019 − 2020		,
Rutgers University Host: Alex Kontorovich, $7/2023$ Neurosymbolic Reasoning, From Formal Logic to Natural Language  University of California, Los Angeles Host: Guy Van den Broeck, $2/2023$ University of California, Santa Barbara Host: Lei Li, $11/2022$ University of Southern California Host: Xiang Ren, $10/2022$ Teaching Machines to Reason Symbolically  OpenAI $3/2022$ Google Host: Denny Zhou, $2/2022$ University of Pennsylvania Host: Mayur Naik, $2/2022$ University of Pennsylvania Host: Swarat Chaudhuri, $1/2022$ Referenting Natural Language Proofs with Verifier-Guided Search  N2Formal Group, Google Host: Markus Rabe, $7/2022$ RESEARCH MENTORING  Zhaoyu Li $2025$ Present Host: Markus Rabe, $7/2022$ Respectively and the University of Toronto  Jiacheng Chen $2024$ Present Undergraduate @ South China University of Technology  Peiyang Song $2023 - 2024$ Undergraduate @ UCSB $\rightarrow$ Undergraduate @ Caltech  Rahul Chalamala $2023$ Undergraduate @ Caltech $\rightarrow$ Researcher @ Together AI  Shixing Yu $2022 - 2023$ Master's student @ UT Austin $\rightarrow$ Ph.D. student @ Cornell  Gene Chou $2021$ Undergraduate @ Princeton $\rightarrow$ Ph.D. student @ Cornell  Jacqueline Yau $2019 - 2020$		, , , , , , , , , , , , , , , , , , ,
Neurosymbolic Reasoning, From Formal Logic to Natural Language  University of California, Los Angeles University of California, Santa Barbara University of Southern California Host: Lei Li, $11/2022$ University of Southern California Host: Xiang Ren, $10/2022$ Teaching Machines to Reason Symbolically  OpenAI Google Host: Denny Zhou, $2/2022$ University of Pennsylvania NSF "Understanding the World Through Code" Program Host: Swarat Chaudhuri, $1/2022$ Renerating Natural Language Proofs with Verifier-Guided Search N2Formal Group, Google Host: Markus Rabe, $7/2022$ RESEARCH MENTORING  Zhaoyu Li PhD student @ University of Toronto Jiacheng Chen Undergraduate @ South China University of Technology Peiyang Song Undergraduate @ UCSB $\rightarrow$ Undergraduate @ Caltech Rahul Chalamala Undergraduate @ Caltech $\rightarrow$ Researcher @ Together AI Shixing Yu Master's student @ UT Austin $\rightarrow$ Ph.D. student @ Cornell Gene Chou Undergraduate @ Princeton $\rightarrow$ Ph.D. student @ Cornell Jacqueline Yau 2019 - 2026		
University of California, Los Angeles University of California, Santa Barbara University of Southern California Host: Lei Li, $11/2022$ University of Southern California Host: Xiang Ren, $10/2022$ Teaching Machines to Reason Symbolically OpenAI Google Host: Denny Zhou, $2/2022$ University of Pennsylvania Host: Mayur Naik, $2/2022$ NSF "Understanding the World Through Code" Program Host: Swarat Chaudhuri, $1/2022$ Generating Natural Language Proofs with Verifier-Guided Search N2Formal Group, Google Host: Markus Rabe, $7/2022$ RESEARCH MENTORING  Zhaoyu Li PhD student @ University of Toronto Jiacheng Chen Undergraduate @ South China University of Technology Peiyang Song Undergraduate @ UCSB $\rightarrow$ Undergraduate @ Caltech Rahul Chalamala Undergraduate @ UCSB $\rightarrow$ Undergraduate @ Caltech Shixing Yu Master's student @ UT Austin $\rightarrow$ Ph.D. student @ Cornell Gene Chou Undergraduate @ Drinceton $\rightarrow$ Ph.D. student @ Cornell Jacqueline Yau 2019 $\rightarrow$ 2021		
University of California, Santa Barbara Host: Lei Li, $11/2022$ University of Southern California Host: Xiang Ren, $10/2022$ Teaching Machines to Reason Symbolically  OpenAI 3/2022 Google Host: Denny Zhou, $2/2022$ University of Pennsylvania Host: Mayur Naik, $2/2022$ NSF "Understanding the World Through Code" Program Host: Swarat Chaudhuri, $1/2022$ Generating Natural Language Proofs with Verifier-Guided Search N2Formal Group, Google Host: Markus Rabe, $7/2022$ RESEARCH MENTORING  Zhaoyu Li 2025 – Present PhD student @ University of Toronto Jiacheng Chen Undergraduate @ South China University of Technology Peiyang Song 2024 – Present Undergraduate @ UCSB $\rightarrow$ Undergraduate @ Caltech Rahul Chalamala 2023 Undergraduate @ Caltech $\rightarrow$ Researcher @ Together AI Shixing Yu 2022 – 2023 Master's student @ UT Austin $\rightarrow$ Ph.D. student @ Cornell Gene Chou 2021 Undergraduate @ Princeton $\rightarrow$ Ph.D. student @ Cornell Jacqueline Yau 2019 – 2020		
University of Southern California Host: Xiang Ren, $10/2022$ Teaching Machines to Reason Symbolically  OpenAI 3/2022 Google Host: Denny Zhou, $2/2022$ University of Pennsylvania Host: Mayur Naik, $2/2022$ NSF "Understanding the World Through Code" Program Host: Swarat Chaudhuri, $1/2022$ Generating Natural Language Proofs with Verifier-Guided Search N2Formal Group, Google Host: Markus Rabe, $7/2022$ RESEARCH MENTORING  Zhaoyu Li 2025 – Present PhD student @ University of Toronto  Jiacheng Chen 2024 – Present Undergraduate @ South China University of Technology Peiyang Song 2023 – 2024 Undergraduate @ UCSB $\rightarrow$ Undergraduate @ Caltech Rahul Chalamala 2023 Undergraduate @ Caltech $\rightarrow$ Researcher @ Together AI Shixing Yu 2022 – 2023 Master's student @ UT Austin $\rightarrow$ Ph.D. student @ Cornell Gene Chou 2021 Undergraduate @ Princeton $\rightarrow$ Ph.D. student @ Cornell Jacqueline Yau 2019 – 2020		
Teaching Machines to Reason Symbolically  OpenAI 3/2022 Google Host: Denny Zhou, 2/2022 University of Pennsylvania Host: Mayur Naik, 2/2022 NSF "Understanding the World Through Code" Program Host: Swarat Chaudhuri, 1/2022 Generating Natural Language Proofs with Verifier-Guided Search N2Formal Group, Google Host: Markus Rabe, 7/2022  RESEARCH MENTORING  Zhaoyu Li 2025 – Present PhD student @ University of Toronto Jiacheng Chen 2024 – Present Undergraduate @ South China University of Technology Peiyang Song 2023 – 2024 Undergraduate @ UCSB $\rightarrow$ Undergraduate @ Caltech Rahul Chalamala 2023 Undergraduate @ Caltech $\rightarrow$ Researcher @ Together AI Shixing Yu 2022 – 2023 Master's student @ UT Austin $\rightarrow$ Ph.D. student @ Cornell Gene Chou 2021 Undergraduate @ Princeton $\rightarrow$ Ph.D. student @ Cornell Jacqueline Yau 2019 – 2020		
OpenAI 3/2022 Google Host: Denny Zhou, 2/2022 University of Pennsylvania Host: Mayur Naik, 2/2022 NSF "Understanding the World Through Code" Program Host: Swarat Chaudhuri, 1/2022 Generating Natural Language Proofs with Verifier-Guided Search N2Formal Group, Google Host: Markus Rabe, 7/2022  RESEARCH MENTORING  Zhaoyu Li 2025 – Present PhD student @ University of Toronto Jiacheng Chen 2024 – Present Undergraduate @ South China University of Technology Peiyang Song 2023 – 2024 Undergraduate @ UCSB $\rightarrow$ Undergraduate @ Caltech Rahul Chalamala 2023 Undergraduate @ Caltech $\rightarrow$ Researcher @ Together AI Shixing Yu 2022 – 2023 Master's student @ UT Austin $\rightarrow$ Ph.D. student @ Cornell Gene Chou 2021 Undergraduate @ Princeton $\rightarrow$ Ph.D. student @ Cornell Jacqueline Yau 2019 – 2020	·	
Google University of Pennsylvania NSF "Understanding the World Through Code" Program Host: Mayur Naik, $2/2022$ RESEARCH MENTORING  RESEARCH MENTORING  Zhaoyu Li PhD student @ University of Toronto  Jiacheng Chen Undergraduate @ South China University of Technology Peiyang Song Undergraduate @ UCSB $\rightarrow$ Undergraduate @ Caltech  Rahul Chalamala Undergraduate @ Caltech $\rightarrow$ Researcher @ Together AI  Shixing Yu Master's student @ UT Austin $\rightarrow$ Ph.D. student @ Cornell  Gene Chou Undergraduate @ Princeton $\rightarrow$ Ph.D. student @ Cornell  Jacqueline Yau  Host: Mayur Naik, 2/2022  Edough Host: Mayur Naik, 2/2022  Edough Host: Mayur Naik, 2/2022  ### Host: Mayur Naik, 2/2022  ### Host: Mayur Naik, 2/2022  #### Host: Mayur Naik, 2/2022  #### Host: Mayur Naik, 2/2022  ################################		3/2022
University of Pennsylvania Host: Mayur Naik, 2/2022 NSF "Understanding the World Through Code" Program Host: Swarat Chaudhuri, 1/2022 Generating Natural Language Proofs with Verifier-Guided Search N2Formal Group, Google Host: Markus Rabe, 7/2022 Host: Markus Rabe, 7/2022 RESEARCH MENTORING  Zhaoyu Li 2025 – Present PhD student @ University of Toronto Jiacheng Chen 2024 – Present Undergraduate @ South China University of Technology Peiyang Song 2023 – 2024 Undergraduate @ UCSB $\rightarrow$ Undergraduate @ Caltech Rahul Chalamala 2023 Undergraduate @ Caltech $\rightarrow$ Researcher @ Together AI Shixing Yu 2022 – 2023 Master's student @ UT Austin $\rightarrow$ Ph.D. student @ Cornell Gene Chou 2021 Undergraduate @ Princeton $\rightarrow$ Ph.D. student @ Cornell Jacqueline Yau 2019 – 2020	-	'
NSF "Understanding the World Through Code" Program Host: Swarat Chaudhuri, $1/2022$ Generating Natural Language Proofs with Verifier-Guided Search  N2Formal Group, Google Host: Markus Rabe, $7/2022$ RESEARCH MENTORING  Zhaoyu Li 2025 - Present  PhD student @ University of Toronto  Jiacheng Chen 2024 - Present  Undergraduate @ South China University of Technology  Peiyang Song 2023 - 2024  Undergraduate @ UCSB $\rightarrow$ Undergraduate @ Caltech  Rahul Chalamala 2023  Undergraduate @ Caltech $\rightarrow$ Researcher @ Together AI  Shixing Yu 2022 - 2023  Master's student @ UT Austin $\rightarrow$ Ph.D. student @ Cornell  Gene Chou 2021  Undergraduate @ Princeton $\rightarrow$ Ph.D. student @ Cornell  Jacqueline Yau 2019 - 2020		
Generating Natural Language Proofs with Verifier-Guided Search  N2Formal Group, Google  Host: Markus Rabe, $7/2022$ RESEARCH MENTORING  Zhaoyu Li  PhD student @ University of Toronto  Jiacheng Chen  Undergraduate @ South China University of Technology  Peiyang Song  Undergraduate @ UCSB $\rightarrow$ Undergraduate @ Caltech  Rahul Chalamala  Undergraduate @ Caltech $\rightarrow$ Researcher @ Together AI  Shixing Yu  Master's student @ UT Austin $\rightarrow$ Ph.D. student @ Cornell  Gene Chou  Undergraduate @ Princeton $\rightarrow$ Ph.D. student @ Cornell  Jacqueline Yau  2019 – 2020	v	
RESEARCH MENTORING  Zhaoyu Li PhD student @ University of Toronto  Jiacheng Chen Undergraduate @ South China University of Technology  Peiyang Song Undergraduate @ UCSB $\rightarrow$ Undergraduate @ Caltech  Rahul Chalamala Undergraduate @ Caltech $\rightarrow$ Researcher @ Together AI  Shixing Yu Master's student @ UT Austin $\rightarrow$ Ph.D. student @ Cornell  Gene Chou Undergraduate @ Princeton $\rightarrow$ Ph.D. student @ Cornell  Jacqueline Yau  Host: Markus Rabe, 7/2022  40225 $\rightarrow$ Present 2024 $\rightarrow$ Present 2024 $\rightarrow$ Present 2024 $\rightarrow$ Present 2024 $\rightarrow$ Present 2025 $\rightarrow$ Present 2024 $\rightarrow$ Present 2025 $\rightarrow$ Present 2026 $\rightarrow$ Point $\rightarrow$ Ph.D. Student 2027 $\rightarrow$ Ph.D. Student $\rightarrow$ Ph.D. Student 2027 $\rightarrow$ Ph.D. Student $\rightarrow$ Ph.D. Student 2028 $\rightarrow$ Ph.D. Student $\rightarrow$ Ph.D. S		
RESEARCH MENTORINGZhaoyu Li PhD student @ University of Toronto $2025$ – Present Undergraduate @ South China University of TechnologyPeiyang Song Undergraduate @ UCSB $\rightarrow$ Undergraduate @ Caltech $2023$ – $2024$ Rahul Chalamala Undergraduate @ Caltech $\rightarrow$ Researcher @ Together AI $2023$ Shixing Yu Master's student @ UT Austin $\rightarrow$ Ph.D. student @ Cornell $2022$ – $2023$ Gene Chou Undergraduate @ Princeton $\rightarrow$ Ph.D. student @ Cornell $2023$ – $2024$ Jacqueline Yau $2019$ – $2020$	Generating Natural Language Proofs with Verifier-Guided	Search
Zhaoyu Li  PhD student @ University of Toronto  Jiacheng Chen  Undergraduate @ South China University of Technology  Peiyang Song  Undergraduate @ UCSB → Undergraduate @ Caltech  Rahul Chalamala  Undergraduate @ Caltech → Researcher @ Together AI  Shixing Yu  Master's student @ UT Austin → Ph.D. student @ Cornell  Gene Chou  Undergraduate @ Princeton → Ph.D. student @ Cornell  Jacqueline Yau  2025 − Present  2024 − Present  2023 − 2024  2023 − 2024  2023 − 2024  2023 − 2025  2025 − Present  2024 − Present  2024 − Present  2023 − 2024  2023 − 2024  2025 − 2025  2026 − 2025  2027 − 2025  2027 − 2025  2027 − 2025  2027 − 2025  2027 − 2026  2028 − 2026  2029 − 2026  2029 − 2026  2020 − 2	N2Formal Group, Google	Host: Markus Rabe, 7/2022
Zhaoyu Li  PhD student @ University of Toronto  Jiacheng Chen  Undergraduate @ South China University of Technology  Peiyang Song  Undergraduate @ UCSB → Undergraduate @ Caltech  Rahul Chalamala  Undergraduate @ Caltech → Researcher @ Together AI  Shixing Yu  Master's student @ UT Austin → Ph.D. student @ Cornell  Gene Chou  Undergraduate @ Princeton → Ph.D. student @ Cornell  Jacqueline Yau  2025 − Present  2024 − Present  2023 − 2024  2023 − 2024  2023 − 2024  2023 − 2025  2025 − Present  2024 − Present  2024 − Present  2023 − 2024  2023 − 2024  2025 − 2025  2026 − 2025  2027 − 2025  2027 − 2025  2027 − 2025  2027 − 2025  2027 − 2026  2028 − 2026  2029 − 2026  2029 − 2026  2020 − 2		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	RESEARCH MENTORING	
Jiacheng Chen $2024$ - PresentUndergraduate @ South China University of Technology $2023$ - $2024$ Peiyang Song $2023$ - $2024$ Undergraduate @ UCSB → Undergraduate @ Caltech $2023$ Rahul Chalamala $2023$ Undergraduate @ Caltech → Researcher @ Together AI $2022$ - $2023$ Shixing Yu $2022$ - $2023$ Master's student @ UT Austin → Ph.D. student @ CornellGene Chou $2023$ Undergraduate @ Princeton → Ph.D. student @ CornellJacqueline Yau $2019$ - $2020$	Zhaoyu Li	2025 – Present
$ \begin{array}{c} \textit{Undergraduate @ South China University of Technology} \\ \textbf{Peiyang Song} & 2023-2024 \\ \textit{Undergraduate @ UCSB} \rightarrow \textit{Undergraduate @ Caltech} \\ \textbf{Rahul Chalamala} & 2023 \\ \textit{Undergraduate @ Caltech} \rightarrow \textit{Researcher @ Together AI} \\ \textbf{Shixing Yu} & 2022-2023 \\ \textit{Master's student @ UT Austin} \rightarrow \textit{Ph.D. student @ Cornell} \\ \textbf{Gene Chou} & 2023 \\ \textit{Undergraduate @ Princeton} \rightarrow \textit{Ph.D. student @ Cornell} \\ \textbf{Jacqueline Yau} & 2019-2026 \\ \hline \end{array} $	* *	
Peiyang Song $Undergraduate @ UCSB \rightarrow Undergraduate @ Caltech$ Rahul Chalamala $Undergraduate @ Caltech \rightarrow Researcher @ Together AI$ Shixing Yu $Master's \ student @ UT \ Austin \rightarrow Ph.D. \ student @ Cornell$ Gene Chou $Undergraduate @ Princeton \rightarrow Ph.D. \ student @ Cornell$ Jacqueline Yau $2019 - 2020$	S .	2024 – Present
$ \begin{array}{c} \textit{Undergraduate} @ \textit{UCSB} \rightarrow \textit{Undergraduate} @ \textit{Caltech} \\ \textbf{Rahul Chalamala} & 2023 \\ \textit{Undergraduate} @ \textit{Caltech} \rightarrow \textit{Researcher} @ \textit{Together} \textit{AI} \\ \textbf{Shixing Yu} & 2022 - 2023 \\ \textit{Master's student} @ \textit{UT Austin} \rightarrow \textit{Ph.D. student} @ \textit{Cornell} \\ \textbf{Gene Chou} & 2021 \\ \textit{Undergraduate} @ \textit{Princeton} \rightarrow \textit{Ph.D. student} @ \textit{Cornell} \\ \textbf{Jacqueline Yau} & 2019 - 2020 \\ \end{array} $		2023 - 2024
$\begin{array}{c} \textit{Undergraduate @ Caltech} \rightarrow \textit{Researcher @ Together AI} \\ \textbf{Shixing Yu} & 2022 - 2023 \\ \textit{Master's student @ UT Austin} \rightarrow \textit{Ph.D. student @ Cornell} \\ \textbf{Gene Chou} & 2021 \\ \textit{Undergraduate @ Princeton} \rightarrow \textit{Ph.D. student @ Cornell} \\ \textbf{Jacqueline Yau} & 2019 - 2020 \\ \end{array}$		
Shixing Yu		2023
$\begin{array}{c} \textit{Master's student @ UT Austin} \rightarrow \textit{Ph.D. student @ Cornell} \\ \textbf{Gene Chou} & 2023 \\ \textit{Undergraduate @ Princeton} \rightarrow \textit{Ph.D. student @ Cornell} \\ \textbf{Jacqueline Yau} & 2019 - 2020 \\ \end{array}$	· · · · · · · · · · · · · · · · · · ·	2002 = 2002
Gene Chou		2022 - 2023
<b>Jacqueline Yau</b> 2019 – 2020	Gene Chou	2021
		2010 2020
		2019 – 2020

## **TEACHING EXPERIENCE**

Head Teaching Assistant, Tsinghua University

Advanced Large Language Model AgentsSpring 2025Guest Co-instructor, UC Berkeley & MOOC2024/5CS 159: Large Language Models for Reasoning2024/5Guest Lecturer, Caltech2021/2 - 2021/5COS 484/584: Natural Language Processing2021/2 - 2021/5Teaching Assistant, Princeton University2013/8 - 2016/7

## **SERVICE**

#### Organizer

The 3rd Workshop on Mathematical Reasoning and AI @ NeurIPS 2023 Tutorial on Machine Learning for Theorem Proving @ NeurIPS 2023

#### Area Chair

International Conference on Machine Learning (ICML), 2025 European Conference on Computer Vision (ECCV), 2024

#### Reviewer

National Academies Workshop Proceedings: "AI to Assist Mathematical Reasoning"

European Research Council (ERC) Advanced Grant 2023

International Conference on Machine Learning (ICML)

Neural Information Processing Systems (NeurIPS)

International Conference on Learning Representations (ICLR)

Journal of Machine Learning Research (JMLR)

IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)

Computer Vision and Pattern Recognition (CVPR)

International Conference on Computer Vision (ICCV)

European Conference on Computer Vision (ECCV)