

KYLE MONTGOMERY

(214) 477-2090 ◇ kylemontgomery@ucsc.edu ◇ linkedin.com/in/kyle-montgomery- ◇ kylemontgomery1.github.io

Research Interests: Foundation Models ◇ Post-Training ◇ Agentic AI ◇ LLM Safety

EDUCATION

PhD in Computer Science, University of California Santa Cruz Sep 2025 – Present

◇ Advisor: Dr. Chenguang Wang

◇ GPA: 3.98/4.00

PhD in Computer Science, Washington University in St. Louis Aug 2024 – Aug 2025

◇ Advisor: Dr. Chenguang Wang

◇ GPA: 3.98/4.00

MS in Computer Science, Washington University in St. Louis Aug 2023 – May 2024

◇ Advisor: Dr. Chenguang Wang

◇ Thesis: Improving the Reasoning Generalization of Large Language Models

◇ GPA: 4.00/4.00

BS in Computer Science and Mathematics, Washington University in St. Louis Aug 2019 – May 2023

◇ GPA: 3.99/4.00

PUBLICATIONS

[1] S Tan, **K Montgomery**, the rLLM team. (2025). rLLM v0.2: RL Training over General Agentic Programs. rLLM Blog.

[2] S Tan, M Luo, C Cai, T Venkat, **K Montgomery**, A Hao, T Wu, A Balyan, M Roongta, C Wang, L Li, R Popa, I Stoica. (2025). rLLM: A Framework for Post-Training Language Agents. Notion Blog.

[3] **K Montgomery***, S Tan*, Y Chen, S Zhuang, T Zhang, R Popa, C Wang. (2025). Budget-aware Test-time Scaling via Discriminative Verification. Workshop on Efficient Reasoning at NeurIPS 2025.

[4] S Kolasani, M Saplin, N Crispino, **K Montgomery**, J Davis, M Zaharia, C (Chi) Wang, C (Chenguang) Wang. (2025). LLM CHESS: Benchmarking Reasoning and Instruction-Following in LLMs through Chess. Workshop on Foundations of Reasoning in Language Models at NeurIPS 2025.

[5] Y Potter*, Z Wang*, N Crispino*, **K Montgomery***, A Xiong*, E Chang, F Pinto, Y Chen, R Gupta, M Ziyadi, C Christodoulopoulos, C Wang, B Li, D Song. (2025). VMDT: Decoding the Trustworthiness of Video Foundation Models. Conference on Neural Information Processing Systems (NeurIPS 2025).

[6] **K Montgomery***, D Park*, J Tu, M Bendersky, B Gunel, D Song, C Wang. (2025). Predicting Task Performance with Context-aware Scaling Laws. Knowledgeable Foundation Models Workshop at ACL 2025.

[7] L Phan, A Gatti, Z Han, N Li, W Zhang, N Crispino, C Wang, D Li, J Shen, **K Montgomery**, H Szlyk, T Wang, S Yoe, A Wang, D Hendrycks, many others. (2025). Humanity’s Last Exam. arXiv preprint 2410.12784.

[8] S Tan*, S Zhuang*, **K Montgomery***, W Tang, A Cuadron, C Wang, R Popa, I Stoica. (2025). JudgeBench: A Benchmark for Evaluating LLM-based Judges. International Conference on Learning Representations (ICLR 2025).

[9] E Pasewark*, **K Montgomery***, K Duan, D Song, C Wang. (2024). Re-Tuning: Overcoming the Compositionality Limits of Large Language Models with Recursive Tuning. Association for Computational Linguistics (ACL 2024).

[10] N Crispino, **K Montgomery**, F Zeng, D Song, C Wang. (2024). Agent Instructs Large Language Models to be General Zero-Shot Reasoners. International Conference on Machine Learning (ICML 2024).

(*) denotes equal contribution.

AWARDS AND HONORS

Dean's Select Fellowship	2024
Gupta Fellowship	2024
Undergraduate Engineering Valedictorian	2023
Summa Cum Laude	2023
Award for Research Excellence	2023
Antoinette Frances Dames Award for Productive Scholarship in Engineering	2021
Dean's List	2019-2023
National Merit Finalist	2018

OPEN SOURCE PROJECTS

Project Lead, *rLLM*, Reinforcement Learning for Language Agents.

- ◇ Has earned 4,700 GitHub stars.
- ◇ GitHub: <https://github.com/rllm-org/rllm>

ACADEMIC SERVICE

Workshop Organizer, *Agents in the Wild: Safety, Security, and Beyond*.

- ◇ Under submission at ICLR 2026.
- ◇ Website: <https://agentwild-workshop.github.io/>
- ◇ Organizers: Dawn Song, Chenguang Wang, Nicholas Crispino, Ruoxi Jia, Kyle Montgomery, Yujin Potter, Vincent Siu, Zhun Wang

TEACHING EXPERIENCE

Advisor, <i>CSE527A: Natural Language Processing</i> , Washington University	Spring 2024
Head Teaching Assistant, <i>CSE217A: Introduction to Data Science</i> , Washington University	Spring 2024
Teaching Assistant, <i>CSE527A: Natural Language Processing</i> , Washington University	Fall 2023
Teaching Assistant, <i>CSE517A: Machine Learning</i> , Washington University	Fall 2023
Head Teaching Assistant, <i>CSE217A: Introduction to Data Science</i> , Washington University	Fall 2023
Head Teaching Assistant, <i>CSE217A: Introduction to Data Science</i> , Washington University	Spring 2022
Teaching Assistant, <i>CSE217A: Introduction to Data Science</i> , Washington University	Fall 2022
Teaching Assistant, <i>CSE217A: Introduction to Data Science</i> , Washington University	Spring 2022
Teaching Assistant, <i>CSE217A: Introduction to Data Science</i> , Washington University	Fall 2021