

Changho Shin

cs1095@princeton.edu
<https://ch-shin.github.io>

Peretsman Scully Hall, Room 120
60 Olden St, Princeton, NJ 08540

ACADEMIC POSITIONS	Princeton University , Princeton, NJ <i>Postdoctoral Researcher</i> • Advisor: Brenden Lake	Feb. 2026 – Present
EDUCATION	University of Wisconsin–Madison • Ph.D. in Computer Science; M.S. in Mathematics • Advisor: Frederic Sala • Thesis: <i>Learning from Weak Signals: Data-Centric Methods for Foundation Models</i> Seoul National University • M.S. in Digital Contents and Information Studies • Advisor: Professor Wonjong Rhee Seoul National University • B.A. in Psychology, B.S. in Computer Science and Engineering • Graduated with honors (Cum Laude)	Sep. 2020 – Dec. 2025 Mar. 2015 – Feb. 2017 Mar. 2011 – Feb. 2015
HONORS & AWARDS	Qualcomm Innovation Fellowship Finalist Best Paper Award Honorable Mention , NeurIPS R0-FoMo Workshop NeurIPS Scholar Award 1st Place , DataComp Competition (Small Track, Filtering) CS Departmental Scholarship , University of Wisconsin-Madison	2024 2023 2023 2023 2020
CONFERENCE PUBLICATIONS	[C9] Changho Shin, David Alvarez-Melis, “Curriculum Learning as Transport: Understanding Curricula with Wasserstein Geodesics”, <i>Conference on Language Modeling (COLM)</i>, 2026. [C8] Jitian Zhao*, Changho Shin*, Tzu-Heng Huang, Srinath Namburi, Frederic Sala, “CARE: Confounder-Aware Aggregation for Reliable LLM Evaluation”, <i>International Conference on Machine Learning (ICML)</i>, 2026. [C7] Changho Shin, John Cooper, Frederic Sala, “Weak-to-Strong Generalization Through the Data-Centric Lens”, <i>International Conference on Learning Representations (ICLR)</i>, 2025. [C6] Yijing Zhang, Dyah Adila, Changho Shin, Frederic Sala, “Personalize Your LLM: Fake it then Align it”, <i>North American Chapter of the Association for Computational Linguistics (NAACL) Findings</i>, 2025. [C5] Changho Shin, Jitian Zhao, Sonia Crompt, Harit Vishwakarma, Frederic Sala, “OTTER: Improving Zero-Shot Classification via Optimal Transport”, <i>Neural Information Processing Systems (NeurIPS)</i>, 2024. [C4] Dyah Adila*, Changho Shin*, Linrong Cai, Frederic Sala, “Zero-Shot Robustification of Zero-Shot Models”, <i>International Conference on Learning Representations (ICLR)</i>, 2024. Best Paper Award Honorable Mention, Oral Presentation at NeurIPS 2023 R0-FoMo Workshop. [C3] Changho Shin, Sonia Crompt, Dyah Adila, Frederic Sala, “Mitigating Source Bias for Fairer Weak Supervision”, <i>Neural Information Processing Systems (NeurIPS)</i>, 2023. [C2] Changho Shin, Winfred Li, Harit Vishwakarma, Nicholas Roberts, Frederic Sala, “Universalizing Weak Supervision”, <i>International Conference on Learning Representations (ICLR)</i>, 2022.	

JOURNAL PUBLICATIONS

- [C1] **Changho Shin**, Sunghwan Joo, Jaeryun Yim, Hyoseop Lee, Taesup Moon, Wonjong Rhee, “Subtask Gated Networks for Non-Intrusive Load Monitoring”, *AAAI Conference on Artificial Intelligence*, 2019.
- [J2] **Changho Shin**, Eunjung Lee, Jeongyun Han, Jaeryun Yim, Hyoseop Lee, Wonjong Rhee, “The ENERTALK Dataset, 15 Hz Electricity Consumption Data from 22 Houses in Korea”, *Scientific Data*, 2019.
- [J1] **Changho Shin**, Seungeun Rho, Hyoseop Lee, Wonjong Rhee, “Data Requirements for Applying Machine Learning to Energy Disaggregation”, *Energies*, May 2019.

PREPRINTS

- [P2] **Changho Shin**, Xinya Yan, Suenggwon Jo, Sungjun Cho, Shourjo Aditya Chaudhuri, Frederic Sala, “TARDIS: Mitigating Temporal Misalignment via Representation Steering”, *arXiv*, 2025.
- [P1] Amanda Dsouza, Christopher Glaze, **Changho Shin**, Frederic Sala, “Evaluating Language Model Context Windows: A ‘Working Memory’ Test and Inference-time Correction”, *arXiv*, 2024.

WORKSHOP PUBLICATIONS

- [W6] **Changho Shin**, Daiwei Chen, John Cooper, Brenden Lake, Frederic Sala, Ramya Korlakai Vinayak, “Compositional Self-Improvement”, *ICML 2026 CompLearn Workshop*.
- [W5] Sungjun Cho, **Changho Shin**, Suenggwon Jo, Xinya Yan, Shourjo Aditya Chaudhuri, Frederic Sala, “LLM-Integrated Bayesian State Space Models for Multimodal Time-Series Forecasting”, *NeurIPS 2025 BERT2S Workshop*.
- [W4] Dyah Adila, **Changho Shin**, Yijing Zhang, Frederic Sala, “Is Free Self-Alignment Possible?”, *NeurIPS 2024 MINT Workshop*.
- [W3] **Changho Shin***, Joon Suk Huh*, Elina Choi, “Pool-Search-Demonstrate: Improving Data-wrangling LLMs via better in-context examples”, *NeurIPS 2023 TRL Workshop*. **Oral Presentation**.
- [W2] **Changho Shin***, Tzu-Heng Huang*, Sui Jiet Tay, Dyah Adila, Frederic Sala, “Multimodal Data Curation via Object Detection and Filter Ensembles”, *ICCV 2023 DataComp Workshop* (Rank #1 in DataComp competition filtering track (small)).
- [W1] **Changho Shin**, Alice Schoenauer Sebag, “Can we get smarter than majority vote? Efficient use of individual rater’s labels for content moderation”, *NeurIPS 2022 ENLSP Workshop*.

JOB EXPERIENCE

Microsoft Research, Cambridge Jun. 2025 – Aug. 2025
Research Intern

- Mentor: David Alvarez-Melis
- Project: *Curriculum Learning as Transport: Understanding Curricula with Wasserstein Geodesics*

Snorkel AI, California Jun. 2024 – Aug. 2024
Research Intern

- Mentor: Christopher Glaze, Paroma Varma
- Projects: *Reward Modeling, Synthetic Data Generation, LLM Evaluation*

Twitter, San Francisco Jun. 2022 – Aug. 2022
ML Engineer Intern

- Mentor: Alice Schoenauer Sebag
- Manager: Milind Ganjoo
- *Improving toxicity classification via weak supervision [W1]*

Encored Technologies , Seoul, Korea	Jan. 2018 – Jul. 2020
<i>Data Scientist</i>	
• Manager: Hyoseop Lee	
• <i>Non-intrusive load monitoring [C1, J1, J2], Energy forecasting</i>	

Korea Institute for Defense Analyses , Seoul, Korea	Jan. 2017 – Dec. 2017
<i>Researcher</i>	

**TEACHING
EXPERIENCE**

University of Wisconsin-Madison	
• Teaching assistant for CS 839 (Foundation Models)	Fall 2023, Fall 2025
• Teaching assistant for CS 300 (Programming II)	Fall 2022, Spring 2023
• Teaching assistant for CS 760 (Machine Learning)	Fall 2021, Spring 2022
• Teaching assistant for CS 320 (Data Programming II)	Spring 2021
• Teaching assistant for CS 220 (Data Programming I)	Fall 2020