jongho.me

Jongho Park

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Education

University of California, Berkeley *Ph.D, EECS, 2025-*
Advisor: Jason D. Lee, Song Mei

University of Wisconsin-Madison *M.S., Computer Sciences, 2021*
Advisor: Christos Tzamos

University of California, Berkeley *B.A., Computer Science and Mathematics (with high honors), 2019*

Work

Research Scientist, KRAFTON Inc. *2021 – 2025*
Lead of Core Research Team *2024 – 2025*
Worked primarily on scalable algorithms for LLMs at Krafton AI.
Advised research on quantization, in-context learning, RLVR, RL theory.
Led the efficient deployment generative agents ("Smart ZOI") onto InZOI in colloboration with NVIDIA.
Projects: Smart ZOI, Long-term memory
Fulfilled alternative mandatory military service for 11/2021–11/2024.

Preprints

*α-β denotes alphabetical order. * denotes equal contribution.*

1. ThinkSafe: self-generated safety alignment for reasoning models
   Seanie Lee, Sangwoo Park, Yumin Choi, Gyeongman Kim, Minki Kang, Jihun Yun, Dongmin Park, **Jongho Park**, Sung Ju Hwang
   Under Review.

2. Lookahead unmasking elicits accurate decoding in diffusion language models
   Sanghyun Lee, Seungryong Kim, **Jongho Park**, Dongmin Park
   Under Review.

3. Effective test-time scaling of discrete diffusion through iterative refinement
   Sanghyun Lee, Sunwoo Kim, Seungryong Kim, **Jongho Park**, Dongmin Park
   Under Review.

4. Alignment as distribution learning: your preference model is explicitly a language model
   Jihun Yun*, Juno Kim*, **Jongho Park**, Jongha Jon Ryu, Junhyuck Kim, Jaewoong Cho, Kwang-Sung Jun
   FoPT workshop at COLT 2025. Under Review.

Publications

1. Not all bits are equal: scale-dependent memory optimization strategies for reasoning models
   Junhyuck Kim, Ethan Ewer, Taehong Moon, **Jongho Park**, Dimitris Papailiopoulos
   ICLR 2026. Efficient Reasoning workshop at NeurIPS 2025.

2. Can large language models develop strategic reasoning? Post-training insights from learning chess
   Dongyoon Hwang, Hojoon Lee, Jaegul Choo, Dongmin Park, **Jongho Park**
   ScalR workshop at COLM 2025

3. Task diversity shortens the ICL plateau
   Jaeyeon Kim, Sehyun Kwon, Joo Young Choi, **Jongho Park**, Jaewoong Cho, Jason D. Lee, Ernest K. Ryu
   TMLR 2025

4. Lexico: extreme KV cache compression via sparse coding over universal dictionaries
   Junhyuck Kim, **Jongho Park**, Jaewoong Cho, Dimitris Papailiopoulos
   ICML 2025. ICLR Workshop on Sparsity in LLMs (spotlight).

5. Can Mamba learn how to learn? A comparative study on in-context learning
   Jongho Park, Jaeseung Park, Zheyang Xiong, Nayoung Lee, Jaewoong Cho, Samet Oymak, Kangwook Lee, Dimitris Papailiopoulos
   ICML 2024

6. First-order stochastic optimization with oblivious noise
   Ilias Diakonikolas, Sushrut Karmalkar, **Jongho Park**, Christos Tzamos (α-β)
   NeurIPS 2023

7. GLM regression with oblivious corruptions
   Ilias Diakonikolas, Sushrut Karmalkar, **Jongho Park**, Christos Tzamos (α-β)
   COLT 2023

8. Prompted LLMs as chatbot modules for long open-domain conversation
   Gibbeum Lee*, Volker Hartmann*, **Jongho Park***, Dimitris Papailiopoulos, Kangwook Lee
   Findings of ACL 2023

9. ReLU regression with Massart noise
   Ilias Diakonikolas, **Jongho Park**, Christos Tzamos (α-β)
   NeurIPS 2021

10. On robust mean estimation under coordinate-level corruption
    Zifan Liu*, **Jongho Park***, Theodoros Rekatsinas, Christos Tzamos
    ICML 2021

11. Literary event detection
    Matthew Sims, **Jongho Park**, David Bamman
    ACL 2019

Awards and Fellowships

Kwanjeong Educational Foundation Fellowship *2019 – 2021*

CS Summer Research Assistantship *Summer 2020*
Awarded to outstanding students who were first-year graduate students at UW-Madison.

CS Departmental Scholarship *UW-Madison, 2019–2020*

Teaching Experience

Teaching Assistant, UW-Madison

- Advanced Algorithms (COMPSCI 787), Fall 2020
- Intro to Algorithms (COMPSCI 577), Spring 2020
- Intro to Discrete Math (COMPSCI 240), Fall 2019

Head Teaching Assistant, UW-Madison

- Intro to Algorithms (COMPSCI 577), Spring 2021

Undergraduate Student Instructor, UC Berkeley

- Efficient Algorithms and Intractable Problems (CS 170), 2018–2019
- Intro to Discrete Math and Probability (CS 70), Summer 2017

Professional Service

Reviewer: ACL, AISTATS, NeurIPS, ICML, ICLR, STOC

Languages

English (native), Korean (native)
Python (PyTorch), LaTeX

References

Jason D. Lee	Associate Professor, UC Berkeley
Song Mei	Assistant Professor, UC Berkeley
Kangwook Lee	Assistant Professor, UW-Madison; Krafton AI
Dimitris Papailiopoulos	Associate Professor, UW-Madison; Microsoft Research
Christos Tzamos	Associate Professor, University of Athens
Ilias Diakonikolas	Professor, UW-Madison