

Albert Ge

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EDUCATION

University of Wisconsin-Madison <i>Ph.D. Computer Science; GPA: 4.0</i>	Madison, WI 2023 - 2028
Harvard University <i>M.E. Computational Science and Engineering; GPA: 4.0</i>	Cambridge, MA 2021 - 2023
California Institute of Technology <i>B.S. Computer Science; GPA: 3.8</i>	Pasadena, CA 2013 - 2017

PREPRINTS

Zheyang Xiong, Ziyang Cai, John Cooper, **Albert Ge**, Vasilis Papageorgiou, Zack Sifakis, Angeliki Giannou, Ziqian Lin, Liu Yang, Saurabh Agarwal, Grigorios Chrysos, Samet Oymak, Kangwook Lee, Dimitris Papailiopoulos. (2024) *Everything Everywhere All at Once: LLMs can In-Context Learn Multiple Tasks in Superposition*.

Albert Ge* and Jack Cai*. (2024) *Ingredients for Transformer Length Generalization*. Midwest Machine Learning Symposium.

Albert Ge, Utku Sirin, Stratos Idreos. *Workload-Aware Neural Architectures*.

AWARDS AND SCHOLARSHIPS

UW-Madison Summer Fellowship	2024
Harvard IACS Student Thesis Scholarship	2022

EXPERIENCE

Lee Lab <i>Independent Study - advisor: Kangwook Lee</i> <ul style="list-style-type: none">Research on length generalization of Transformers.	Madison WI Spring 2024
SprocketLab <i>Independent Study - advisor: Fred Sala</i> <ul style="list-style-type: none">Combining weak supervision with large language models.	Madison WI Aug 2023 – Present
Data Systems Laboratory <i>Research Fellow - advisor: Stratos Idreos</i> <ul style="list-style-type: none">Developed a new method for compression deep neural networks using layer clustering. Reduced number of parameters by 18% while preserving generalization. Implemented with Pytorch.Implemented multi-GPU support to scale feature-map identification and reduce overall compression time by 4x, using NCCL, SLURM.	Cambridge, MA Jan 2022 – May 2023
Academia.edu <i>Software Engineer</i>	San Francisco, CA 2019 - 2021
Abbie Stemcentrx <i>Software Engineer</i>	South San Francisco, CA 2017 - 2019

TEACHING

UW Madison CS354: Machine Organization and Programming <i>Teaching Assistant</i>	Madison, WI Fall 2023, Spring 2024
Harvard CS205: High Performance Computing (graduate) <i>Teaching Fellow</i>	Cambridge, MA Spring 2023

TECHNICAL SKILLS

Programming: Python, C/C++, SQL, Javascript

Technologies: Pytorch, SLURM, Tensorflow, Pandas, Sklearn, React, AWS (EC2, Redshift, Kinesis), Postgres