

Albert Ge

Email: afge@wisc.edu — Website: www.albertge.com

EDUCATION

University of Wisconsin-Madison

Ph.D. Computer Science; GPA: 4.0

Madison, WI

2023 - 2028

Harvard University

M.E. Computational Science and Engineering; GPA: 4.0

Cambridge, MA

2021 - 2023

California Institute of Technology

B.S. Computer Science; GPA: 3.8

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

Independent Study - advisor: Kangwook Lee

- Research on length generalization of Transformers.

Madison WI

Spring 2024

SprocketLab

Independent Study - advisor: Fred Sala

- Combining weak supervision with large language models.

Madison WI

Aug 2023 – Present

Data Systems Laboratory

Research Fellow - advisor: Stratos Idreos

- 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

Software Engineer

San Francisco, CA

2019 - 2021

Abbie Stemcentrx

Software Engineer

South San Francisco, CA

2017 - 2019

TEACHING

UW Madison CS354: Machine Organization and Programming

Teaching Assistant

Madison, WI

Fall 2023, Spring 2024

Harvard CS205: High Performance Computing (**graduate**)

Teaching Fellow

Cambridge, MA

Spring 2023

TECHNICAL SKILLS

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

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