VASILIS PAPAGEORGIOU

Computer Sciences Ph.D. student

University of Wisconsin-Madison

vpapageorgio@wisc.edu ⬦ Personal Website ⬦ Google Scholar ⬦ X ⬦ Github

EDUCATION

University of Wisconsin-Madison (UW-Madison), *Madison, WI*
Ph.D. in Computer Sciences   Aug 2022 - present
Advisor: Dimitris Papailiopoulos

Technical University of Crete (TUC), *Chania, Greece*
MEng in Electrical and Computer Engineering   Sep 2016 - Oct 2021
Advisor: Aggelos Bletsas
Grade: 9.55/10 *(top 0.5% in school's history as of Oct 2021)*
Summa cum laude

RESEARCH INTERESTS

Theoretical/Applied Machine Learning, Deep Learning, Large Language Models, Optimization

RESEARCH EXPERIENCE

Applied Science Intern   May 2025 - Aug 2025
AWS AI Labs, Amazon.Inc

- Working on Large Language Reasoning Models.

Research Assistant   Aug 2022 - present
University of Wisconsin-Madison

- Working on Large Language Models and Machine Learning.

Undergrad Research Assistant   Dec 2020 - Oct 2021
Technical University of Crete

- Developed an algorithmic framework for distributed and asynchronous iterative algorithms in ambiently powered wireless sensor networks.

Electrical and Computer Engineering Intern   Jul 2019 - Jul 2019
Telecommunication Systems Research Institute, TUC

- Implemented a wireless communication link of two transmitting and a single receiving Software Defined Radios (SDR) using Matlab.
- Applied synchronization, channel estimation, detection techniques, and Alamouti's space-time block code.

CONFERENCE PUBLICATIONS

- Zheyang Xiong, Ziyang Cai, John Cooper, Albert Ge, Vasilis Papageorgiou, Zack Sifakis, Angeliki Giannou, Ziqian Lin, Liu Yang, Saurabh Agarwal, Grigorios G Chrysos, Samet Oymak, Kangwook Lee, Dimitris Papailiopoulos. "Everything Everywhere All at Once: LLMs can In-Context Learn Multiple Tasks in Superposition". ICML 2025 (**Spotlight**).

- Zheyang Xiong, Vasilis Papageorgiou, Kangwook Lee, and Dimitris Papailiopoulos. "From Artificial Needles to Real Haystacks: Improving Retrieval Capabilities in LLMs by Finetuning on Synthetic Data." ICLR 2025.

- V. Papageorgiou, A. Nichoritis, P. Vasilakopoulos, G. Vougioukas and A. Bletsas, "Towards Ambiently Powered Inference on Wireless Sensor Networks: Asynchrony is the Key!," *2021 17th International Conference on Distributed Computing in Sensor Systems (DCOSS)*, Pafos, Cyprus, 2021, pp. 458-465 (received **best paper award**)

JOURNAL PUBLICATIONS

- V. Papageorgiou*, A. Nichoritis*, P. Vasilakopoulos*, G. Vougioukas and A. Bletsas, "Design and Implementation of Ambiently Powered Internet of Things-That-Think With Asynchronous Inference," in *IEEE Internet of Things Journal*, vol. 10, no. 17, pp. 15283-15300, 1 Sept.1, 2023, doi: 10.1109/JIOT.2023.3265423.

TEACHING ASSISTANTSHIP

CS 220 (Data Programming)   Fall '24
University of Wisconsin-Madison

MATH 101 (Intro to Calculus and Analysis)   Fall '19, Fall '20
Technical University of Crete

SCHOLARSHIPS & FELLOWSHIPS

Gerondelis Foundation Graduate Study Scholarship ($5,000)   Nov 2023
Gerondelis Foundation

First-year CS Departmental Scholarship ($4,000)   2022 - 2023
University of Wisconsin-Madison

HONORS & AWARDS

Excellence Award for Undergraduate Studies   Dec 2024
Technical Chamber of Greece

Summa cum laude   Oct 2021
Technical University of Crete

2021 IEEE WCNEE Best Paper Award   Jul 2021
IEEE

SOCIETIES & AFFILIATIONS

IEEE TUC Student Branch   Oct 2018 - Oct 2021

SKILLS

Technical Skills	Python, Pytorch, Matlab, C, Java, LaTeX
Languages	English (fluent), German, Greek (native)
Miscellaneous	Guitar