

PANAGIOTIS KALIOSIS

PhD Student in Computer Science

 [Personal Website](#)

 pkaliosis@cs.stonybrook.edu

 [Google Scholar](#)

 [GitHub Profile](#)

 Stony Brook, NY

 [Panagiotis Kaliosis](#)

EDUCATION

- 08/2024 - Present **PhD in Computer Science** **Stony Brook University, USA**
- Research in Human-centered Multimodal Learning, Video Understanding and Collaborative Planning
 - Advised by [Prof. Dimitris Samaras](#) and [Prof. Andrew Schwartz](#)
- 10/2022 - 11/2023 **MSc in Computer Science** **Athens University of Economics and Business, Greece**
- Thesis: *"Exploring Unimodal, Multimodal & Few-shot Deep Learning Methods for Diagnostic Captioning"*
 - Advised by Prof. I. Androutsopoulos and Prof. J. Pavlopoulos
- 10/2018 - 09/2022 **BSc in Computer Science** **Athens University of Economics and Business, Greece**
- Exchange Semester at Stockholm University, Sweden, Spring 2022

SELECTED PUBLICATIONS

- P. Kaliosis**, J. Pavlopoulos, "Learning to Align: Addressing Character Frequency Distribution Shifts in Handwritten Text Recognition", in *Findings of the Empirical Methods in Natural Language Processing (EMNLP)*, 2025 [\[pdf\]](#)
- Z. Wang, W. Li, **P. Kaliosis**, O. Rambow, S. Brennan, "LVLMs are Bad at Overhearing Human Referential Communication", in *Proceedings of the Empirical Methods in Natural Language Processing (EMNLP)*, 2025 [\[pdf\]](#)
- K. Triaridis*, **P. Kaliosis***, ER Nguyen, J. Xu, H. Le, D. Samaras, "Improving Contrastive Learning for Referring Expression Counting", *joint first-authorship, *Pre-print*, 2025 [\[pdf\]](#)
- P. Kaliosis**, J. Pavlopoulos, F. Charalampakos, G. Moschovis and I. Androutsopoulos, "A data-driven guided decoding mechanism for Diagnostic Captioning", in *Findings of the Association for Computational Linguistics (ACL)*, 2024 [\[pdf\]](#)
- P. Kaliosis**, S. Eleftheriou, C. Nikou and T. Giannakopoulos, "A Self-Supervised Learning Approach for Detecting Non-Psychotic Relapses using Wearable-based Digital Phenotyping", in *Workshop at IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, 2024 [\[pdf\]](#)
- E. Gkritzali, **P. Kaliosis**, S. Galanaki and T. Giannakopoulos, "Greek2MathTex: A Greek Speech-to-Text Framework for LaTeX Equations Generation", in *Hellenic Conference on Artificial Intelligence (SETN)*, 2024 [\[pdf\]](#)
- P. Kaliosis**, G. Moschovis, F. Charalampakos, J. Pavlopoulos and I. Androutsopoulos, "AUEB NLP Group at Image-CLEFmedical Caption 2023", in *Conference and Labs of the Evaluation Forum Working Notes (CLEF)*, 2023 [\[pdf\]](#)

PROFESSIONAL & RESEARCH EXPERIENCE

- 08/2024 - Present **Research Assistant** **Computer Vision Lab, Stony Brook University**
- Research on multimodal learning for human-centered video understanding
 - Research on embedding Theory of Mind capabilities into World Models for better collaborative planning
 - Research on systematic evaluation of the reasoning capabilities of LLMs for mental health assessments
- 01/2024 - 08/2024 **Founding Research Engineer** **OrbDB / KTH Royal Institute of Technology, Sweden**
- Research on addressing uncertainty in sparse knowledge graphs via conformal prediction
 - Built the company's training and evaluation Graph Machine Learning pipelines
- 07/2024 - 08/2024 **Research Intern** **Archimedes Research Unit, Greece**
- Carried out research in test-time distribution alignment for Handwritten Text Recognition
- 04/2023 - 04/2024 **Research Assistant** **National Center for Scientific Research "Demokritos", Greece**
- Conducted research in real-time speech-to-text recognition and speech analysis for mental health
- 10/2022 - 04/2023 **Research Assistant** **Athens University of Economics and Business, Greece**
- Explored constrained decoding techniques in Vision-Language Models for Diagnostic Image Captioning

TEACHING EXPERIENCE

- Fall 2024 **Teaching Assistant** **Stony Brook University, USA**
- Teaching assistant for CSE353 - Machine Learning
- Fall 2022 **Teaching Assistant** **Athens University of Economics and Business, Greece**
- Teaching assistant for INF112 - "Introduction to Mathematics"

HONORS, AWARDS AND INVITED TALKS

- **2024:** Invited talk at Archimedes Research Unit on "Guided decoding for Diagnostic Image Captioning"
- **2024:** Invited talk at Athens University of Economics and Business on "How to pursue a PhD abroad"
- **2023:** Student travel grant for the Conference and Labs of the Evaluation Forum (CLEF) in Thessaloniki, Greece
- **2023:** Graduated with Honors - MSc in Computer Science, AUEB

LANGUAGES

Greek: Level: **Native**
English: Level: **Proficient**
Spanish: Level: **Intermediate**

SKILLS

Programming: Python, PyTorch, Tensorflow, CUDA, SQL, C/C++, JavaScript.
Technologies: Docker, Kubernetes, Spark, Hadoop.

OTHER ACTIVITIES

August 2024	ACL Workshop Volunteer Served as a student volunteer at the ML4AL Workshop , hosted in ACL 2024	ML4AL Workshop, ACL 2024
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