Georgios Pantazopoulos

Education

PhD in Robotics and Autonomous Systems

Sep 2021 - present

CDT in Robotics and Autonomous Systems, Heriot-Watt University, University of Edinburgh

o Thesis: Inductive Biases in Architectures of Modern Visual Language Models, supervised by A. Suglia

MSc in Artificial Intelligence with Speech and Multimodal Interaction

Sep 2020 - Aug 2021

Heriot-Watt University

- o Grade: 84/100 (1st with Distinction)
- o Thesis: Compositional Generalization in Image Captioning, supervised by A. Eshghi

MEng in Electrical and Computer Engineering

Sep 2012 - Jun 2018

National Technical University of Athens

- o Grade: 7.7/10, Major: Computer Science
- o Thesis: Stress Detection from Speech Signals, supervised by A. Potamianos

Publications

Evaluating Multimodal Language Models as Visual Assistants for Visually Impaired Users 2025 Annual Meeting of the Association for Computational Linguistics, [paper]

o A.Karamolegkou*, M.Nikandrou*, G.Pantazopoulos*, D.Sanchez, P.Rust, R.Dhar, D.Hershcovich, A.Søgaard

CROPE: Evaluating In-Context Adaptation of Vision and Language Models to Culture-Specific Concepts 2025 Annual Conference of the North American Chapter of the Association for Computational Linguistics, [paper]

o M. Nikandrou, G. Pantazopoulos, N. Vitsakis, I. Konstas, A. Suglia

Shaking Up VLMs: Comparing Transformers and Structured State Space Models for Vision & Language Modeling 2024 Conference on Empirical Methods in Natural Language Processing, [paper]

o G. Pantazopoulos, M.Nikandrou, A. Suglia, O. Lemon, A. Eshghi

Enhancing Continual Learning in Visual Question Answering with Modality-Aware Feature Distillation 2024 ACL Third Workshop on Advances in Language and Vision Research, [paper]

o M.Nikandrou*, G. Pantazopoulos*, I. Konstas, A. Suglia

Lost in Space: Probing Fine-grained Spatial Understanding in Vision and Language Resamplers 2024 Annual Conference of the North American Chapter of the Association for Computational Linguistics, [paper]

o G. Pantazopoulos, A. Suglia, O. Lemon, A. Eshghi

Learning To See But Forgetting To Follow: Visual Instruction Tuning Makes LLMs More Prone To Jailbreak Attacks 2024 LREC-COLING Third Workshop on Safety for Conversational AI, [paper]

o G. Pantazopoulos, A. Parekh, Malvina Nikandrou, A. Suglia

Multitask Multimodal Prompted Training for Interactive Embodied Task Completion 2023 Conference on Empirical Methods in Natural Language Processing, [paper]

o **G. Pantazopoulos**, M.Nikandrou, A. Parekh, B. Hemanthage, A. Eshghi, I. Konstas, V. Rieser, O. Lemon, A. Suglia **EMMA: A foundation model for embodied, interactive, multimodal task completion in 3D environments** 2023 Alexa Prize SimBot Challenge Proceedings, [paper]

o A. Parekh*, M.Nikandrou*, G. Pantazopoulos*, B. Hemanthage, A. Eshghi, I. Konstas, O. Lemon, A. Suglia

Combine to Describe: Evaluating Compositional Generalization in Image Captioning 2022 ACL Student Research Workshop, [paper]

o G. Pantazopoulos, A. Suglia, A. Eshghi

Data Augmentation using GANs for Speech Emotion Recognition

2019 Annual Conference of the International Speech Communication Association, [paper]

o A. Chatziagapi, G. Paraskevopoulos, D. Sgouropoulos, **G. Pantazopoulos**, M.Nikandrou, T. Giannakopoulos, A. Katsamanis, A. Potamianos, S. Narayanan

Projects

Retrievit Jan 2025 - Jun 2025

Heriot-Watt University

o Benchmarking Transformers, State Space Models, and Hybrid models on long sequence modeling

EMMA Jan 2022 - May 2023

Alexa Prize Simbot Challenge, Finalist [code]

Developed an interactive language-guided agent executing instructions in simulated environments

Exploring the Role of Patch Resolution for Vision Transformers University of Edinburgh

Jan 2022 - Mar 2022

o Explored the trade-off between performance gains and inference cost on downstream tasks

Industry Experience

AI Research Intern Jun 2025 - present

Alan Turing Institute

Worked on thinking models for GUI agents

Developed ranking models for filtering noisy data for training GUI agents

Software Engineer Intern

Feb 2025 - Apr 2025

Reka AI

Implemented constrastive methods for image-to-image, image-to-video, image & text-to video retrieval

Machine Learning Engineer

Sep 2018 - Apr 2020

Behavioral Signal Technologies Inc.

- Developed audio and text models for emotion recognition
- Established pipelines for data collection and annotation from crowdsourcing platforms
- o Contributed to the implementation of voice activity detection algorithms
- o Carried out research in active learning pipeline to address class imbalances
- Contributed to real-time systems for emotion and hesitation recognition

Teaching Experience

 $A\theta NLP 2024 / 2025$ Sep 2024 / Sep 2025

Summer School Teaching Assistant, [code]

Developed the lab materials for sequence modeling and multimodal models

Data Mining and Machine Learning

Sep 2022 - present

Teaching Assistant

- Contributed to the infrastructure and the coursework of the module
- o Supervised groups of postgraduate students on their semester project

Introduction to Natural Language Processing

Sep 2023 - present

Teaching Assistant

- o Contributed to the infrastructure and the coursework of the module
- Supervised groups of students on their semester project

Technical skills

Python, Matlab, R, C, C++, C#, Java, PDDL, Bash, SML **Programming Languages**

Frameworks PyTorch, Hugging Face, PyTorch Lightning, Faiss, Milvus, Trax, Keras, scikit-learn **Development Tools**

Weights & Biases, Gradio, AWS, Git, Slurm, Docker, Kubernetes, Jenkins

Invited Talks

Visual Grounding in Multimodal Language Models

Jun 2025

Alan Turing Institute, [slides]

Embodied MultiModal Agent for Language-guided Action Execution in 3D Simulated Environments

Oct 2022

CDT in Robotics and Autonomous System Conference, [slides]

Honors & Awards

Evaluating Multimodal Language Models as Visual Assistants for Visually Impaired Users

Jul 2025

Pioneer Center of AI Best Paper Award, ACL 2025 SAC Highlights

Exploring the Role of Patch Resolution for Vision Transformers

Mar 2022

University of Edinburgh, 2nd place in the annual IBM Awards

Academic Service

Jun 2024 / Oct 2024 / Jun 2025 ARR Reviewer

IEEE SLT218 Conference

Dec 2018