ALKIS KOUDOUNAS

Ph.D. Student @ Politecnico di Torino

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EDUCATION

Ph.D., Computer Engineering, AI & ML

Politecnico di Torino, joint project with Amazon Alexa AI

📅 2022 – Today   📍 Turin, IT

Research Topics: Responsible AI for Speech Foundation Models

Expected graduation: January 2026

- SPADE Workshop co-organizer at IEEE ICASSP '25
- Best Student Paper Award at Interspeech '24
- Presenting author at IEEE ICASSP '23–'25, Interspeech '23–'25, ACM KDD '24, LREC-COLING '24, NeurIPS '23, ACM Multimedia '22
- Online Chair & Head of Volunteers at ECML-PKDD '23
- Volunteer at ACM KDD '24, LREC-COLING '24, ACM Multimedia '22
- Invited Speaker at School of AI Algiers '23
- ICASSP '24, Interspeech '24, KDD '24 Travel Grant recipient
- Attendee at Generative Modeling Summer School '23, Advanced Language Processing Winter School '23, Synapse AI Symposium '23, Mediterranean Machine Learning Summer School '22
- Supervisor of 10+ master's student theses

M.Sc., Computer Engineering, Data Analytics

Politecnico di Torino, 110 cum Laude

📅 2019 – 2021   📍 Turin, IT

Thesis: Object detection and 6DoF pose estimation with ToF cameras

B.Sc., Computer and Automation Engineering

Università Politecnica delle Marche, 110 cum Laude

📅 2016 – 2019   📍 Ancona, IT

Thesis: Gradient-based learning methods extended to manifolds

WORK EXPERIENCE

Applied Research Scientist Internship

Amazon AGI - Foundations (Speech & Audio)

📅 August 2025 – November 2025   📍 Sunnyvale, CA* (Aachen, DE, in office)

Research on multilingual scalar and generative speech reward models for Latin and non-Latin languages, with cross-lingual transfer analysis. Applications include improved multilingual TTS from different evaluation aspects.

Applied Research Scientist Internship

Amazon AGI - Speech Understanding

📅 June 2024 – December 2024   📍 Aachen, DE

Research on rewards and confidence models for ASR, working at both utterance- and token-level metrics. Improved error recognition quality and developed hallucination detection and mitigation pipeline.

M.Sc. Research Thesis

Thales Alenia Space Italy

📅 May 2021 – November 2021   📍 Turin, IT

Topics: Object Detection and 6 DoF Pose Estimation with ToF Cameras

B.Sc. Research Thesis

TUAT, Tokyo University of Agriculture and Technology

📅 March 2019 – May 2019   📍 Tokyo, JP

Topics: Optimization algorithms

ABOUT ME

I am a half Greek-half Italian Ph.D. student, deeply astonished by the mystic AI kingdom we are living. I love exploring problems and envisioning unseen solutions. I treasure listening to music, travelling and taking night-ish photos. I do relish space and the immensity that surrounds it.

"Ad Astra per Aspera"

TEACHING

Data Science Lab: Process and Methods

Teaching Assistant

📅 2022 – Today   📍 Politecnico di Torino

Data Science and Database Technology

Teaching Assistant

📅 2022 – Today   📍 Politecnico di Torino

OTHER EXPERIENCES

Tutor at MALTO student team '23–today
3rd @ Volvo Challenge, ECLM-PKDD '24

AYA Italian Language Ambassador '23
C4AI Community Project (Cohere)

NASA Space Apps Challenge '22
2nd Prize: ρBerTO - *Predicting symptoms of possible Carrington Events*

1° The Sound of AI Hackathon '22
"Most Marketable Solution" Prize for *CALM - Contrastive Alignment of Language and Music*

IEDC Ancona '19–'24
IT and Technical Support

Scout Leader '13–'20
Deputy head of AN2 group, Head of "Wolf Cubs", children aged 8-11

COMPUTER SKILLS

Python   C++   Java   C

PyTorch   Transformers   Jax (Learning)

HTML   CSS   Javascript   React.js

LANGUAGES

Italian (Mother Tongue) ●●●●●
Greek ●●●●○
English ●●●●○
Spanish ●●●○○