PhD Student

Evangelos Chatzipantazis

Email: vaghat@seas.upenn.edu Webpage: Google Scholars Link

RESEARCH INTERESTS

Geometric Deep Learning, Equivariant representations, Optimization on Manifolds, Generative Models, Differential Geometry, AI for Science and Engineering

EDUCATION

University Of Pennsylvania

Sep 2018-

- **PhD** in Computer and Information Science
 - Specialization: Geometric Deep Learning, Computer Vision
 - · Advisor: Kostas Daniilidis
- Master in Statistics and Data Science (Wharton)

Jan 2023-

- Current GPA: 4.00/4.00
- Relevant Coursework: Statistical Machine Learning, High-dimensional Statistics, Time-Series Forecasting, Stochastic Processes, Conformal Prediction
- **MSE** in Robotics (GRASP Laboratory)

Dec 2022

- GPA: 4.00/4.00
- Relevant Coursework: Convex Optimization, Learning in Robotics, Machine Perception, Advanced Machine Perception, Principles of Deep Learning, Theory of Computation

National Technical University of Athens (NTUA), Greece

Sep 2012- Sep 2018

- **BSc & MSc** in Electrical and Computer Engineering (5-year joint degree; 300 ECTS)
 - **GPA**: 9.58/10.0 (top 1% among graduate class of 341 students; highest honors)
 - Major GPA: 9.64/10.0 (top 1%) Specialization: Computer Science
 - Relevant Coursework: Computer Vision, Stochastic Processes, Pattern Recognition, Deep Learning, Advanced Algorithms, Algorithmic Machine Learning, Spectral Graph Theory, Social Network Analysis
 - Thesis: "Spectral Graph Methods with Applications in Computer Vision" Advisor: Dr. Petros Maragos, Professor

HONORS &AWARDS

- Outstanding Paper Award in Multi-Robot Systems, ICRA 2023.
- Gerondelis Foundation Graduate Scholarship (to support Ph.D. Studies) in the year 2022-2023.
- Thomaideion Award (highest grade among all students of Electrical and Computer Engineering) in academic years 2015-2016 and 2017-2018
- Kritikos Award (highest grade in all courses of Mathematics among fellow students for the academic year 2016-2017).
- Papakyriakopoulos Award (highest grade in all courses of Mathematics among fellow students for years 2015-2016).

RESEARCH

- E.Chatzipantazis*, S.Pertigkiozoglou*, K.Daniilidis.
 Robust Point Cloud Registration via Equivariant Representations.
 (Under Review)
- E.Chatzipantazis*, S.Pertigkiozoglou*, E.Dobriban, K.Daniilidis. SE(3)-Equivariant Attention
 Networks for Shape Reconstruction in Function Space.
- M.Tzes, N.Bousias, E.Chatzipantazis, G.Pappas. Graph Neural Networks for Multi-Robot Active Information Acquisition. (Outstanding Paper Award in Multi-Robot Systems) ICRA 2023
- E.Chatzipantazis*, S.Pertigkiozoglou*, K.Daniilidis, E.Dobriban. Learning Augmentation Distributions Using Transformed Risk Minimization. TMLR **2023**
- K.Chaney*, B.Bucher*, E.Chatzipantazis, J.Shi, K.Daniilidis. Unsupervised Monocular Depth and Latent Structure. CVPR Workshop on 3D Scene Understanding for Vision and Robotics,

 2019

ACADEMIC SERVICE

- ML Conference Reviewer: ICML 2022, ICML 2023, NeurIPS 2022, ICCV 2023
- Teaching Assistant, "ESE650: Learning In Robotics" under *Dr. Kostas Daniilidis* **2019**
- Teaching Assistant, "CIS680: Advanced Machine Perception" under Dr. Jianbo Shi (Website) 2019
- Teaching Assistant, "ESE546: Principles of Deep Learning", Dr. Pratik Chaudhari (Class Notes (Co-authored))
 2019, 2020
- Lab Assistant, "Introduction to Computer Programming", under Prof. N.Papaspyrou.
 2014- 2015
- Research Assistant in Computer Vision and Signal Processing Lab (CVSP): Implementation of spectral algorithms for image segmentation, under *Prof P.Maragos*.

 2017

LANGUAGES TECHNICAL SKILLS Greek: Native language. English: fluent. French: novice

- Programming Languages
 - Current Frequent Use: Python
 - Past Frequent Use: C, C++, Java, Prolog, SMLNJ, MATLAB, HTML5, Javascript, PHP, mySQL
- **Other Programming Skills**
 - PyTorch, Parallel & GPU Programming , Github, LATEX, Unix Kernel programming, bash scripting

OTHER INTERESTS Competitive Swimming (7 years), Water Polo (3 years), Tennis (3 years), Guitar(self-taught)