NIKOLAOS DIMITRIADIS

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♀ Greece

update: January 2025



PROFESSIONAL EXPERIENCE

Google DeepMind

Student Researcher

♀ Zurich, Switzerland / Remote m Dec 2023 - Dec 2024

- Conducted research on text-to-image generative models
- On site and full-time Dec 2023 February 2024, remote and part-time March 2024 Dec 2024

EDUCATION

École Polytechnique Fédérale de Lausanne

PhD in Computer Science

- Advisors: François Fleuret & Pascal Frossard

- Research Focus: Model Merging, Multi-Task Learning, Pareto Front Learning, Continual Learning

National Technical University of Athens

BSc & MSc in Electrical and Computer Engineering

- Thesis: "Tropical Geometry and Applications in Machine Learning and Optimization"

- Advisor: Petros Maragos

- GPA: 9.2/10

American College of Greece

Athens, Greece

Minor in Finance

- GPA 4.0/4.0

- Imperial College Business School summer school: SNF/ACG scholarship for abroad studies

PUBLICATIONS

- [1] Wang*, Dimitriadis*, Favero, Ortiz-Jimenez, Fleuret, Frossard: LiNeS: Post-training Layer Scaling Prevents Forgetting and Enhances Model Merging. to appear at ICLR (2025) paper link paper website
- [2] Dimitriadis, Frossard, Fleuret: Pareto Low-Rank Adapters: Efficient Multi-Task Learning with Preferences. to appear at ICLR (2025) paper link
- [3] Wang*, Dimitriadis*, Ortiz-Jimenez, Fleuret, Frossard: Localizing Task Information for Improved Model Merging and Compression. ICML (2024) paper link paper website
- [4] Matoba, Dimitriadis, Fleuret: Benefits of Max Pooling in Neural Networks: Theoretical and Experimental Evidence. Accepted in TMLR (2023) paper link
- [5] Yüzügüler, Dimitriadis, Frossard: Flexible Channel Dimensions for Differentiable Architecture Search. Preprint (2023) paper link
- [6] Dimitriadis, Frossard, Fleuret: Pareto Manifold Learning: Tackling Multiple Tasks via Ensembles of Single-Task Models. ICML (2023) paper link

- [7] **Dimitriadis**, Fleuret, Frossard: *SequeL*: A Continual Learning Library in PyTorch and JAX. CVPR Workshop on Continual Learning (non-archival track) (2023) paper link <u>website</u>
- [8] Yüzügüler, **Dimitriadis**, Frossard: *U-Boost NAS: Utilization-Boosted Differentiable Neural Architecture Search*. ECCV (2022) paper link
- [9] **Dimitriadis**, Maragos: Advances in Morphological Neural Networks: Training, Pruning and Enforcing Shape Constraints. ICASSP (2021) paper link
- [10] **Dimitriadis**, Maragos: Advances in the training, pruning and enforcement of shape constraints of Morphological Neural Networks using Tropical Algebra. ArXiv (2020) paper link

AWARDS

- SNF/ACG Study Abroad Program Scholarship Awarded for summer school studies at the Imperial College Business School by Stavros Niarchos Foundation (SNF) and American College of Greece (ACG). - ACG Merit Scholarship & SNF Scholarship Example 2018 - Jun 2020 Dual scholarship for parallel studies at the American College of Greece. - Right to Virtuosity Distinction ₩ Jun 2018 Awarded for extraordinary performance at the Classical Guitar Degree examinations of the National Conservatory of Greece. - Classical Guitar Degree **#** Jun 2018 Achieved after twelve years of studies at the National Conservatory of Greece. - "The Great Moment for Education" Eurobank EFG Scholarship ₩ Oct 2014 Achieved the highest score at the national exams among students of "Ecole

Franco-Héllenique Saint Joseph".

- Sœur Sébastienne Scholarship

₩ Oct 2007 - Jun 2014

Full academic scholarship for Junior High and High School at "Ecole Franco-Héllenique Saint Joseph".

TEACHING

- Courses: Deep Learning, Fundamentals of inference and learning, Probability and Statistics
- Co-advised multiple MSc theses with Swisscom and multiple MSc semester projects

SKILLS	LANGUAGES
Python Git PyTorch JAX Docker	English (fluent), French (intermediate), Greek (native)