

George Dasoulas

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EDUCATION

APRIL 2019 - Today	École Polytechnique , Palaiseau, Paris, France. <ul style="list-style-type: none">• PhD candidate in Computer Science, focused on Machine Learning and Graph Representation Learning.• Laboratory: Data Science and Mining Team, LIX, École Polytechnique.• Funding: CIFRE PhD Collaboration with Huawei Technologies, France.• Thesis title: <i>"Towards Expressive Graph Neural Networks: Theory, Algorithms, and Applications"</i>.• Thesis supervision: Prof. Michalis Vazirgiannis (DaSciM).• External advisors: Dr. Aladin Virmaux (Huawei), Dr. Kevin Scaman (INRIA Paris).• Planned defense date: March 2022.
OCTOBER 2012 - FEBRUARY 2018	National Technical University of Athens , Athens, Greece. <ul style="list-style-type: none">• BSc & MSc in Electrical and Computer Engineering (5-year joint degree; 300 ECTS)<ul style="list-style-type: none">– Order of Entrance: 10th among undergraduate students– Overall GPA: 9.06/10 (Excellent). Top 3% among graduate class– Specialization: Computer Science (Major), Mathematics, Networks (Minor)• Thesis : <i>"Predictive Refueling - Combining machine learning algorithms with optimization calculations for operations planning"</i>. Grade: 10/10.• Thesis supervision: Prof. Nectarios Koziris (National Technical University of Athens), Dr. Florian Mittag (TWT GmbH Science & Innovation).
JULY 2012	Nationwide University Entrance Examination score : 19.676/20.000 (top 1% nationwide).

PROFESSIONAL EXPERIENCE

October 2018 - Today	Huawei Technologies , Paris, France <ul style="list-style-type: none">• Doctoral researcher in graph machine learning.• Laboratory: Noah's Ark Lab, AI department of Huawei R&D.• Research focus: Representation learning algorithms for static and dynamic graphs.• Project focus: Development of theoretical and practical methods for structured representation learning, specialized in biomedical and communication networks.
June 2017 - January 2018	NIKI Ltd Digital Engineering , Ioannina, Greece & TWT GmbH Science & Innovation , Stuttgart, Germany. <ul style="list-style-type: none">• MSc Thesis research in machine learning for prediction-based optimization.• Project: "Predictive Mechanism for optimal refueling strategies"<ul style="list-style-type: none">– Benchmarking of ML algorithms for time series forecasting.– Recommender system implementation for short-term prediction of fuel price schemes and decision making on optimal refueling.
October 2013 - February 2016	Software Engineering Laboratory at NTUA, Greece <ul style="list-style-type: none">• Laboratory Assistant for computer programming courses.• Tasks: Part-time teaching (twice a week), supporting in laboratory exercises undergraduate students and overseeing the final laboratory examination procedure.• Pertinent Professor: Nikolaos Papaspyrou
September 2014 - January 2017	Private Tutoring , Athens, Greece <ul style="list-style-type: none">• Tutor for high-school and undergraduate students• Courses: Linear Algebra, Calculus, Electromagnetism, Computer Programming

PUBLICATIONS

Conferences

1. George Dasoulas, Kevin Scaman, Aladin Virmaux. Lipschitz Normalization for Self-Attention Layers with Application to Graph Neural Networks. In *International Conference on Machine Learning (ICML)*, 2021.
2. Michail Chatzianastasis, George Dasoulas, Georgios Siolas, Michalis Vazirgiannis. Graph-based Neural Architecture Search with Operation Embeddings. In *Neural Architectures: Past, Present and Future Workshop for International Conference on Computer Vision (ICCV)*, 2021.
3. George Dasoulas, Johannes Lutzeyer, Michalis Vazirgiannis. Learning Parametrised Graph Shift Operators. In *International Conference on Learning Representations (ICLR)*, 2021.
4. George Dasoulas, Giannis Nikolentzos, Kevin Scaman, Aladin Virmaux, Michalis Vazirgiannis. Ego-based Entropy Measures for Structural Representations on Graphs. In *International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, 2021.
5. George Dasoulas, Ludovic Dos Santos, Kevin Scaman, Aladin Virmaux. Coloring graph neural networks for node disambiguation. In *International Joint Conference on Artificial Intelligence (IJCAI)*, 2020.
6. Stratis Limnios, George Dasoulas, Dimitrios M. Thilikos, Michalis Vazirgiannis. Hcore-Init: A graph-based initialization method for neural networks. In *International Conference of Pattern Recognition (ICPR)*, 2020.

Journals

7. Giannis Nikolentzos, George Dasoulas, Michalis Vazirgiannis. k-hop Graph Neural Networks. *Neural Networks*, Volume 130, Pages 195-205, October 2020.

Patents

8. George Dasoulas, Ludovic Dos Santos, Kevin Scaman, Aladin Virmaux. Node Disambiguation. WO 2021/058096 A1 International Publication Number. April 2021.

Under Submission

9. Giannis Nikolentzos, George Dasoulas, Michalis Vazirgiannis. Permute Me Softly: Learning Soft Permutations for Graph Representations, 2021.
10. Guillaume Salha-Galvan, Johannes Lutzeyer, George Dasoulas, Romain Hennequin, Michalis Vazirgiannis. Modularity-Aware Graph Autoencoders for Joint Community Detection and Link Prediction, 2021.
11. Michalis Chatzianastasis, Johannes Lutzeyer, George Dasoulas, Michalis Vazirgiannis. Graph Ordering Attention Networks, 2022.

HONORS, AWARDS & CERTIFICATES

November 2020	Eleftheria Barka Scholarship. Scholarship for graduation excellence and pursuit of doctoral studies for the academic year 2020-2021.
November 2019	Eleftheria Barka Scholarship. Scholarship for graduation excellence and pursuit of doctoral studies for the academic year 2019-2020.
December 2015	Papakyriakopoulos Award. Award of excellence in Mathematics (corresponding subjects in Mathematics).
March 2014	Silver Medal in South Eastern Mathematical Olympiad for university students (aka. Seemous), Iasi, Romania.
October 2013	Participation in the IEEEExtreme 24-Hour Programming Competition.
September 2012	“The Great Moment of Education” Award – Scholarship by Eurobank EFG, for excellency in national qualifications exams.
May 2010	Certificate for the theoretical and practical educational seminar for C.P.R - F.B.A.O - A.E.D knowledge, Red Cross, Greece.
March 2009	Bronze Medal in National Mathematical Olympiad for high school students in Athens.

COMPUTER SKILLS

Operating Systems: Ubuntu, Debian, Unix, Windows, MacOS.

Programming Languages: C, C++, Python, R, Java, SQL, Haskell, OCaml, Prolog, MATLAB, bash, Latex.

SOCIETIES & AFFILIATIONS

- Elsevier's Neural Networks Journal, Reviewer, 2021-Today.
- IEEE Transactions on Neural Networks and Learning Systems, Reviewer, 2020-Today.
- IEEE Computer Society, Member, 2013-2014.

TEST SCORES

- General GRE: Quantitative Score: 167/170, Verbal Score: 157/170, Essay: 4/6.
- TOEFL iBT : 100/120.

LANGUAGES

- **Greek** (Native speaker)
- **English** (Excellent - CEF:C2) : Examination for the Certificate of Proficiency in English (ECPE)
- **German** (Very good command - CEF :C1) : Goethe-Zertificat B1, TestDAF Level C1
- **French** (Intermediate)