FEDERICO ERRICA

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Looking for **Research** Opportunities - Deep Learning for **Graphs**

EDUCATION

University of Pisa, Italy *November 2018 - Present*
Ph.D. in Computer Science, **Probabilistic Deep Learning for Graphs**
Supervised by Davide Bacciu and Alessio Micheli

University of Pisa, Italy *March 2018*
M.Sc. in Computer Science (110/110 Hons.)
Thesis: "*A generative approach for learning contexts in graphs*"

University of Pisa, Italy *October 2015*
B.Sc. in Computer Science (110/110)

EXPERIENCE

University College London January 2021 - May 2021
Visiting Scholar *Virtual*

Facebook AI Research June 2019 - September 2019
Research Intern *London, UK*

Laife Reply March 2018 - October 2018
Machine Learning Researcher *Milano, IT*

SELECTED PUBLICATIONS

Carta, A., Cossu, A., Errica, F. & Bacciu, D. *Catastrophic Forgetting in Deep Graph Networks: an Introductory Benchmark for Graph Classification* in *Graph Learning Benchmark Workshop, **The Web Conference*** **(Spotlight - Equal Contribution)** (2021).

Errica, F., Bacciu, D. & Micheli, A. *Graph Mixture Density Networks* in ***ICML*** (2021).

Errica, F. *et al.* A deep graph network-enhanced sampling approach to efficiently explore the space of reduced representations of proteins. ***Frontiers in Molecular Biosciences*** **8** (2021).

Bacciu, D., Errica, F. & Micheli, A. Probabilistic Learning on Graphs via Contextual Architectures. ***Journal of Machine Learning Research*** **21. (First Author - Alphabetical Order)** (2020).

Bacciu, D., Errica, F., Micheli, A. & Podda, M. A Gentle Introduction to Deep Learning for Graphs. ***Neural Networks*** **129. (Equal Contribution)**, 203–221 (2020).

Errica, F., Podda, M., Bacciu, D. & Micheli, A. *A fair comparison of graph neural networks for graph classification* in ***ICLR*** **(Equal Contribution)** (2020).

Bacciu, D., Errica, F. & Micheli, A. *Contextual Graph Markov Model: A Deep and Generative Approach to Graph Processing* in ***ICML*** **(First Author - Alphabetical Order)** (2018).

MAIN GITHUB PROJECTS

PyDGN *Link*
A Research Library for Deep Graph Networks

gnn-comparison *Link*
A Fair, Robust, and Reproducible comparison of Deep Graph Networks

CGMM *Link*
The Contextual Graph Markov Model

HONOURS AND AWARDS

2nd place - Ilaria Castelli Award *Link*
Best Master's Degree Thesis on Machine Learning and Pattern Recognition

ICML 2018 Travel Award
Grant by the International Machine Learning Society

INVITED TALKS

IBM *April 2021*
Graph Representation Learning: from Neural Beginnings to Probabilistic Perspectives

Continual AI *April 2021*
Presentation of our work on Catastrophic Forgetting for Deep Graph Networks

ACTIVITIES

Reviewer
TNNLS, TPAMI, ICML, ICLR, NeurIPS, AAAI, Neurocomputing, IJCNN, ESANN

Co-organizer of ESANN Special Session *October 2021*
Complex Data: Learning Trustworthily, Automatically, and with Guarantees *Link*

Teaching Assistant
Machine Learning *2020-2021*
Computational Neuroscience *2019-2020*

LANGUAGES

Italian
Native Speaker

English
Cambridge C2 Proficiency (CPE) - grade B (219/230)