Dr. Nicolò Navarin

Curriculum Vitæ

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Personal information

I was born on October 16^{th}, 1984 in Dolo (Venice) - Italy. Now I live in Padova.

Current Position

2016-2017 **Research Assistant**, *University of Padova (Italy)*.
Multi-perspective Process Mining for Streams of Events

Research interests

Artificial intelligence, machine learning (statistical inference, data analysis, data mining), machine learning on structured data, graph mining, graph kernels, machine learning for bioinformatics.

Publications

C9 **Hyper-parameter tuning for graph kernels via Multiple Kernel Learning.** Carlo M. Massimo, Nicolo' Navarin and Alessandro Sperduti. *In 23rd International Conference on Neural Information Processing, Kyoto, Japan, October 16-26 2016.*

J2 **An Empirical Study on Budget-Aware Online Kernel Algorithms for Streams of Graphs** Giovanni Da San Martino, Nicolò Navarin and Alessandro Sperduti. *In Neurocomputing (to appear).*

C8 **Measuring the Expressivity of Graph Kernels through the Rademacher Complexity.** Luca Oneto, Nicolo' Navarin, Michele Donini, Alessandro Sperduti, Fabio Aiolli and Davide Anguita. *In 24th European Symposium on Artificial Neural Networks, Computational Intelligence and Machine Learning, Bruges, Belgium, April 27-29 2016 (to appear).*

J1 **Ordered Decompositional DAG Kernels Enhancements** Giovanni Da San Martino, Nicolò Navarin and Alessandro Sperduti. *In Neurocomputing, Volume 192, 5 June 2016, Pages 92–103.*

C7 **Multiple Graph-Kernel Learning** Fabio Aiolli, Michele Donini, Nicolò Navarin and Alessandro Sperduti. *In 2015 IEEE Symposium on Computational Intelligence and Data Mining.*

C6 **Extending local features with contextual information in graph kernels.** Nicolò Navarin, Alessandro Sperduti and Riccardo Tesselli. *In 22nd International Conference on Neural Information Processing, Istanbul, Turkey, November 9-12 2015.*

C5 **Exploiting the ODD framework to define a novel effective graph kernel.** Giovanni Da San Martino, Nicolò Navarin and Alessandro Sperduti. *In 23th European Symposium on Artificial Neural Networks, Computational Intelligence and Machine Learning, Bruges, Belgium, April 22-24 2015.*

C4 **Graph Kernels Exploiting Weisfeiler-Lehman Graph Isomorphism Test Extensions.** Giovanni Da San Martino, Nicolò Navarin and Alessandro Sperduti. *In 21st International Conference on Neural Information Processing, November 3-6 2014, Kuching, Sarawak, Malaysia.*

TH **Learning with Kernels on Graphs: DAG-based kernels, data streams and RNA function prediction.** Nicolò Navarin. *PhD Thesis.*

C3 **A Lossy Counting Based Approach for Learning on Streams of Graphs on a Budget .** Giovanni Da San Martino, Nicolò Navarin and Alessandro Sperduti. *In 23rd. International Joint Conference on Artificial Intelligence, August 3-9, 2013 - Beijing, China.*

C2 **A memory efficient graph kernel.** Giovanni Da San Martino, Nicolò Navarin and Alessandro Sperduti. *In WCCI 2012 IEEE World Congress on Computational Intelligence, IJCNN, June, 10-15, 2012 - Brisbane, Australia.*

C1 **A tree-based kernel for graphs.** Giovanni Da San Martino, Nicolò Navarin and Alessandro Sperduti. *In Proceedings of the 12th SIAM International Conference on Data Mining, Anaheim, California, April 26 - 28, 2012, p. 975-986.*

Teaching

2016 Co-supervisor of a Computer Science Master thesis: "A New Methodology For Combining Graph Kernels".

2016 Teaching support for the course *Databases*, First Level Degree in Computer Science, University of Padova.

2015 Co-supervisor of a Computer Science Master thesis: "Adding Contextual Information to Graph Kernels".

2014-2016 Teaching support for the course *Informatics and Bioinformatics*, First Level Degree in Biology, University of Padova.

2011-2014 Teaching support for the course *Computer Architecture*, First Level Degree in Computer Science, University of Padova.

Education

2011-2014 **PhD** in Computer Science, XXVI cycle at University of Bologna (Italy), under the supervision of prof. Alessandro Sperduti.

2008–2010 **Master's degree in Computer Science *cum laude***, *University of Padova*.
Course of studies *Artificial Intelligence*.
Thesis: *Graph kernels: a new DAG-based approach*.
Supervisor: Alessandro Sperduti.

2005–2008 **Bachelor's degree in Computer Science**, *University of Padova*.
Evaluation: 102/110.

Experience

2014-2015 **Research Assistant**, *University of Padova (Italy)*.
Development of innovative kernel methods for genome analysis.

2013 **Visiting PhD student**, Chair for Bioinformatics, Department of Computer Science, Albert-Ludwigs-University Freiburg.
Application of machine learning methods to non coding RNA analysis.

2010 **Scholarship**, *University of Padova*.
Study of kernel-based learning methods for structured data analysis.

2008 **Stage**, *Allos srl*, Carmignano di Brenta (Padova).
Design and develop of an LMS-based news management system

Professional activities

Co-organizer

Special Sessions: Advances in Learning with Kernels: Theory and Practice in a World of growing Constraints, in ESANN 2016.

Large Datasets and Big Data Analytics: Theory, Methods, and Applications, in IJCNN 2017.

Speaker

Conferences: 12th SIAM International Conference on Data Mining, April 26-28 2012, Anaheim, California

WCCI 2012, IEEE World Congress on Computational Intelligence, June, 10-15 2012, Brisbane, Australia.

23rd. International Joint Conference on Artificial Intelligence, August 3-9 2013, Beijing, China.

21st International Conference on Neural Information Processing, November 3 - 6 2014, Kuching, Sarawak, Malaysia.

23th European Symposium on Artificial Neural Networks, Computational Intelligence and Machine Learning, April 22-24 2015, Bruges, Belgium.

22nd International Conference on Neural Information Processing, November 9-12 2015, Istanbul, Turkey.

IEEE Symposium on Computational Intelligence and Data Mining, December 8-10 2015, Cape Town, South Africa.

24th European Symposium on Artificial Neural Networks, Computational Intelligence and Machine Learning, April 27-29 2016, Bruges, Belgium.

Reviewer/PC member

Journals: AI communications, Neural networks, Information Processing Letters, IEEE Transactions on Information Forensics & Security

Magazines: IEEE Computational Intelligence Magazine (CIM): CI4BigData

Conferences	IEEE 3CA 2010, SSCI/CIDM 2011, IJCAI 13, ESANN 2015, AAAI 2015, ESANN 2016

Languages

Italian	**Native**
English	**Intermediate**

Computer skills

Operating Systems	Mac Os X, Linux, Windows	Database	(design and management) SQL (notions) Data warehouse
Programming Languages	C++, C, Java, J2EE, ADA, Python	Markup Languages	HTML, XML
Programming tools	GIT, SVN, valgrind, gdb, eclipse, QTCreator etc..		
Machine learning environments	Scikit-learn, Shogun		

Interests

I have a passion for technology. Furthermore, I like reading and I train for powerlifting.

Personal data processing consent

I consent the use of my personal data in accordance with the provisions of Italian decree 196/2003.

Padova , October 11, 2016