

Luigi Carratino

PHD IN MACHINE LEARNING

DIBRIS - Università degli Studi di Genova · Via Dodecaneso, 35 - 16146 Genova, Italy

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Education

DIBRIS - Università degli Studi di Genova

Genova, Italy

PHD IN MACHINE LEARNING

Nov. 2016 - PRESENT

- Topic: "Resource Efficient Large-Scale Machine Learning"
- Advisor: Prof. Lorenzo Rosasco

Università degli Studi di Genova

Genova, Italy

MASTER IN COMPUTER SCIENCE

2014 - 2016

- Thesis: "Online Learning Approaches to Dynamic Pricing in a Partial Monitoring Setting"
- Advisors: Prof. Rui Castro, Prof. Lorenzo Rosasco
- Final score: 110/110 cum Laude

Università degli Studi di Genova

Genova, Italy

BACHELOR IN COMPUTER SCIENCE

2011 - 2014

- Thesis: "Iterative Methods for Sparse Learning"
- Advisors: Prof. Silvia Villa, Prof. Lorenzo Rosasco
- Final score: 110/110

SHORT VISITING POSITIONS

Eindhoven University of Technology

Eindhoven, Netherlands

VISITING RESEARCHER

Feb. 2016 - Jul. 2016

Publications

Gaussian Process Optimization with Adaptive Sketching: Scalable and No Regret

D. Calandriello, L. Carratino, A. Lazaric, M. Valko, L. Rosasco. — *Conference on Learning Theory (COLT)*, 2019

<https://arxiv.org/abs/1903.05594>

Learning with SGD and Random Features

L. Carratino, A. Rudi, L. Rosasco — *Advances in Neural Information Processing Systems (NeurIPS)* [SPOTLIGHT], 2018

<https://arxiv.org/abs/1807.06343>

On Fast Leverage Score Sampling and Optimal Learning

A. Rudi, D. Calandriello, L. Carratino, L. Rosasco — *Advances in Neural Information Processing Systems (NeurIPS)*, 2018

<https://arxiv.org/abs/1810.13258>

FALKON: An Optimal Large Scale Kernel Method

A. Rudi, L. Carratino, L. Rosasco — *Advances in Neural Information Processing Systems (NeurIPS)*, 2017

<https://arxiv.org/abs/1705.10958>

Invited Talks

SWSL 2019, Stuttgart Workshop on Statistical Learning - Stuttgart, DE - Jul. 2019

Title: Algorithmic Regularization for Fast and Optimal Large-Scale Machine Learning

EUROPT 2019, Advances in Nonlinear Optimization and Applications session - Glasgow, UK - Jun. 2019

Title: Algorithmic Regularization for Fast Large-Scale Machine Learning

SIAM CSE 2019, Inverse Problems in Machine Learning session - Spokane, WA, USA - Mar. 2019

Title: Algorithmic Regularization for Machine Learning

CMStatistics 2018, Optimisation for machine learning and online methods session - Pisa, IT - Dec. 2018

Title: Learning with Implicit Regularization and Sketching

Poggio Lab, MIT - Cambridge, USA - Oct. 2018

Title: Algorithmic Regularization for Machine Learning

SIMAI 2018, mini-symposium on Large Scale Optimization - Rome, IT - Jul. 2018

Title: Stochastic Preconditioning for Optimal Large-Scale Machine Learning

PhD & Faculty Seminars, DIBRIS, University of Genoa - Genoa, IT - May. 2018

Title: Fast and Optimal Kernel Methods for Large Scale Machine Learning

Teaching

Machine Learning

TEACHING ASSISTANT, MSc IN COMPUTER SCIENCE, UNIVERSITY OF GENOVA

Genova, Italy
Fall 2018 – Fall 2017

Regularization Methods for Machine Learning

TEACHING ASSISTANT, PHD COURSE ON ADVANCED MACHINE LEARNING, UNIVERSITY OF GENOVA

Genova, Italy
18-22 Jun 2018

Regularization Methods for Machine Learning @ SIMULA

TEACHING ASSISTANT, PHD COURSE ON ADVANCED MACHINE LEARNING, SIMULA RESEARCH LABORATORY

Oslo, Norway
02-06 May 2017

Algorithms and Data Structures

TEACHING ASSISTANT, BSc IN COMPUTER SCIENCE, UNIVERSITY OF GENOVA

Genova, Italy
Spring 2017

Introduction to Programming

TEACHING ASSISTANT, BSc IN COMPUTER SCIENCE, UNIVERSITY OF GENOVA

Genova, Italy
Fall 2016

Scholarships & Awards

Jun. 2016 **PhD Studentship** from University of Genova

Nov. 2015 **Master Thesis Abroad Scholarship** from University of Genova

Jun. 2015 **Microsoft Big Data & IoT Food Hackathon - EXPO 2015** Ranked first in Data Modeling challenge

Services

Reviewer JMLR, NeurIPS 2018

Coorganizer Regularization Methods for Machine Learning 2018 school, Genova, Italy

Coorganizer Regularization Methods for Machine Learning @ SIMULA 2017 school, Oslo, Norway

Co-supervision Bachelor student from University of Genova, Aug.- Sep. 2018

Co-supervision Intern Bachelor student from École Normale Supérieure (Paris), Jun.-Jul. 2018

Organizer LCSL Machine Learning seminar series 2019, Genova, Italy

Skills

Programming Languages: Advanced: MATLAB, PYTHON. Intermediate: C, C++. Basic: JAVA

Languages

Italian: Native

English: Fluent

Extracurricular Activity

Diploma in Piano Performance

CONSERVATORIO NICCOLÒ PAGANINI

Genova, Italy
2003 - 2012