

EDUCATION

Sapienza Università di Roma, Class of 2025 (XXXVIII cycle)

Rome, Italy

Ph.D. Data Science

Advisor: Professor Stefano Leonardi.

Research Interests: Mechanism Design, Online Algorithms, Online Learning.

ETH Zurich, Class of 2022

Zurich, Switzerland

Master's Computer Science

Coursework: Advanced Algorithms, Algorithmic Game Theory, Optimization for Data Science, Randomized Algorithms and Probabilistic Methods, High-Dimensional Statistics, Foundations of Reinforcement Learning, Reliable and Interpretable AI, Artificial Intelligence in Education, Computational Intelligence Lab, Information Security Lab, Big Data, Network Modeling.

Princeton University, Class of 2020

Princeton, NJ, United States

BSE Computer Science (Magna Cum Laude)

Minors: Applied and Computational Mathematics, Statistics and Machine Learning, Technology and Policy

Coursework: Theory of Algorithms, Economics and Computation, Computational Complexity Theory, Probability and Stochastic Systems, Algorithms and Data Structures, Programming Systems, Advanced Machine Learning, Applied Machine Learning, Advanced Programming Techniques, Mathematical Econometrics.

PUBLICATIONS

Prophet Inequalities via the Expected Competitive Ratio

with Tomer Ezra, Stefano Leonardi, Rebecca Reiffenhäuser, Alexandros Tsionas-Dimitriadis. Under submission.

Fully Dynamic Online Selection through Online Contention Resolution Schemes

with Vashist Avadhanula, Andrea Celli, Riccardo Colini-Baldeschi, Stefano Leonardi. To appear in AAAI '23.

OTHER ACADEMIC RESEARCH & TECHNICAL REPORTS

Best-Choice Prophet Inequalities with and without Samples

Sapienza University Rome, with Prof. Stefano Leonardi, Fall 2021

Low-degree polynomials for Gaussian Graphical Models Computation-Information Gap

ETH Zurich, with Prof. David Steurer, Spring 2021

Truthful Combinatorial Auctions: Bidders with Partition Valuation Functions

Sapienza University Rome, with Prof. Stefano Leonardi, Fall 2020 - Spring 2021

Credible, Truthful, Optimal, Bounded-Round Mechanisms through Commitment Schemes

Princeton University, with Prof. Matthew S. Weinberg, Summer 2020

Exploiting Mean-Based Bidders in Symmetric Settings

Princeton University, with Prof. Mark Braverman, Spring 2020

Robust OOD Detection in Secure Open-World Learning

Princeton University, with Prof. Prateek Mittal, Spring 2019

Poisoning Attacks with Generative Adversarial Nets

Imperial College London, with Prof. Emil Lupu, Summer 2018

WORK EXPERIENCE

Sapienza University Rome, Department of DIAG

Research Assistant, Rome (Italy), November 2021 - October 2022

ETH Zurich, Department of MTEC

Applied Game Theory Student Assistant, Zurich (Switzerland), November 2020 - November 2021

NASA Goddard Space Flight Center

Machine Learning Intern, Greenbelt (MD, United States), Summer 2019

King Street Capital Management

Data Science Intern, New York City (NY, United States), Spring 2019

Princeton University, Department of Computer Science

Lab Teaching Assistant, Princeton (NJ, United States), February 2018 - February 2019

Max Planck Institute for Dynamics and Self-Organization

Applied Algorithms Intern, Gottingen (Germany), Summer 2017

Villa Santa Teresa, Istituto Rizzoli

Applied Mathematics Intern, Bagheria (Italy), Summer 2015

AWARDS

High-Honors (Magna cum Laude) in Princeton Computer Science (2020)

Gamma Kappa Alpha, The National Italian Honor Society of Princeton University (2020)

ETH Exchange Program Award Winner (2019)

Streicker International Fellows Fund Award Winner (2018)

UROP Research Program Award Winner (2018)

International Internship Program Award Winner (2017)

UWC successful candidate (2014)

AFS/Intercultura successful candidate (2014)

ACTIVITIES

STOC 2022. Symposium on Theory of Computing, Rome, Italy. *Volunteer.*

WALE 2022. Workshop on Algorithms for Learning and Economics, Naxos, Greece. *Poster.*

PROGRAMMING SKILLS

Languages: Java, C, Matlab, SQL, HTML, CSS, JavaScript, jQuery, AJAX, Verilog, R, C++, React Native, AWK, x86 Assembly, LaTeX, PyTorch, Keras, TensorRow

Databases: MySQL, PostgreSQL, MongoDB, Cypher, HBase, Neo4j, ROLAP

Frameworks: Django, Flask, oTree

VCS: Emacs, GitHub, Bitbucket, Visual Studio