Ambrogio Maria Bernardelli
CURRICULUM VITAE

EDUCATION

High school

September 2011 - July 2016

From September 2011 to July 2016 I was enrolled at Liceo Scientifico Statale Torquato Taramelli. I obtained my high school diploma on the 11th of July 2016, with the following results: 100 / 100, discussing the essay "I barbari. Saggio sulla mutazione" by Alessandro Baricco. During high school, I participated in several students competitions, such as the ANISN Natural Science Olympiads (regional phase in 2013, 2014, 2015), the Gran Premio di Matematica Applicata (7th place in 2016), and the Italian Mathematical Olympiad (team semifinalist in 2016, team finalist and 35th place in 2015).

Bachelor's degree

October 2016 - September 2019

From October 2016 to September 2019 I was enrolled in the Bachelor's degree Course in Mathematics at the University of Pavia. I graduated on the 19th of September 2019 with the following result: 110 / 110 cum laude. On that date, I discussed my Bachelor's Thesis "Rappresentazioni Lineari di Gruppi Finiti" ("Linear Representations of Finite Groups"), written under the supervision of Professor Alberto Canonaco.

Master's degree

October 2019 - September 2021

From October 2019 to September 2021 I was enrolled in the Master's degree Course in Mathematics at the University of Pavia. During this period, I benefited from a scholarship awarded to me following an evaluation of my qualifications, an oral and a written test, and the achievement of objectives concerning grades in the Master's degree course exams and obtaining my degree within a set timeframe. I graduated on the 23rd of September 2021 with the following result: 110 / 110 cum laude. On that date, I discussed my Master's Thesis "Aspetti Algebrici e Combinatori della Teoria degli Operad" ("Algebraic and Combinatorial Aspects of Operad Theory"), written under the supervision of Professor Alberto Canonaco.

Ph.D. course

January 2022 - present

I am currently enrolled in a Ph.D. course in Computational Mathematics and Decision Sciences in a joint programme between the University of Pavia and the Università della Svizzera Italiana.

CONFERENCES AND WORKSHOPS

July 2022

Presentation of the work *Scheduling elective surgeries under uncertainty: a multi-objective stochastic approach* at the ICCOPT / MOPTA 2022 conference held at the Lehigh University in Bethlehem, PA. This work got the 2nd place out of 13 submissions at the 14th AIMMS-MOPTA Optimization Modeling Competition.

September 2022

Presentation of the work *Scheduling elective surgeries under uncertainty: a multi-objective stochastic approach* at the YAMC 2022 conference.

November 2022

Presentation of the work *A MILP approach to a structured ensemble Binarized Neural Network* at the "Matematica per l'Intelligenza Artificiale e il Machine Learning - Giovani ricercatori" conference, held at the Politecnico di Torino. This work was also presented by the co-author Simone Milanesi at the

"Mathematics of Machine Learning" workshop held in January 2023 at the Centro di Ricerca Matematica Ennio De Giorgi and at the 7th AIROYoung Workshop held in February 2023 at the Università degli Studi di Milano.

February 2023 Presentation of the work *A linear approximation for a stochastic optimal power flow problem based on wind energy sources* at the 7th AIROYoung Workshop, held at the Università degli Studi di Milano.

PUBLICATIONS

Journal Articles

February 2023 *Multi-objective stochastic scheduling of inpatient and outpatient surgeries*. Submitted to Flexible Services and Manufacturing, currently under review.

Conference Proceedings

December 2022 *The BeMi Stardust: a Structured Ensemble of Binarized Neural Networks*, arxiv here. Accepted at LION17.

OTHER ACTIVITIES

October 2019 - September 2021 I was one of the founding members of the student association "Matematica Pavese", which aimed to organize activities for student orientation, such as lectures, conferences, and meetings with companies.

May 2022 - present I am a co-organizer of Caffè Beltrami, a cycle of seminars aimed at introducing different areas of research in mathematics to Bachelor's and Master's students.

February 2022 - July 2022 Tutoring activity for first-year students attending the Bachelor's degree program in Mathematics at the University of Pavia.

October 2022 - February 2023 Tutoring activity for the course "Geometria e Algebra" held by Professor Francesco Bonsante for the Bachelor's degree program "Bioingegneria" at University of Pavia.

PERSONAL INFORMATIONS

e-mail address ambrogiobernardelli@gmail.com

phone number +39 339 200 1516

research group website CompOpt

ORCID 0000-0002-2328-7062

SIGNATURE

March 16, 2023