# Denis Mazzucato

## Ph.D. Student



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- 2024–Feb. 2025 **Postdoc**, *Carmege Mellon University & NASA*, Pittsburgh, PA & Mountain View, CA (USA) Six months short Postdoc position at CMU & NASA with Corina Pasareanu
- 2020-Dec. 2024 **Ph.D.**, Inria & École Normale Supérieure | PSL, Paris (FR), supervised by Caterina Urban Static Analysis by Abstract Interpretation of Quantitative Program Properties
- 2015–Sep. 2020 **Master and Bachelor**, *University of Padua*, Padua (IT), magna cum laude 110/110 Computer Science, Dipartimento di Matematica, Università degli Studi di Padova

## Experiences and Awards

- 2024 Radhia Cousot Award, SAS 2024, Pasadena (USA), "Quantitative Static Timing Analysis"
- 2024 **Fundings Award**, Automated Reasoning Amazon Research Award, Amazon "Proving the Absence of Timing Side Channels in Cryptographic Applications" with Corina Pasareanu
- 2023 **Summer School**, *Summer School Marktoberdorf*, Marktoberdorf (DE) Scientific foundations and technologies for improving the quality and security of software
- 2022 **Research intern**, *Amazon*, Prime Video, London (UK)
  Six months internship project in Amazon Prime Video as a research intern
- 2020 **Exchange Program**, *Vrije Universiteit*, Amsterdam (NL) Six months student exchange program
- 2018 **Developer**, *THRON*, Piazzola sul Brenta, Padua (IT) Quality Assurance, three months internship

#### Work Interest

Static Analysis, Abstract Interpretation, Security, Formal Methods, Theorem Provers

### Research Service

- Speaker SAS 2021/22/24, NFM 2024, CSV 2023, Amazon 2022, MRG Imperial College London 2022, Antique Research Team 2021/22/23
- Sub-Reviewer CSV 2024, TACAS 2023, CAV 2021
- Artifact Eval. PLDI 2024, ECOOP 2024 TACAS 2023/24, CAV 2023, SAS 2022/23
- Student Vol. ETAPS 2023, SPLASH 2022/23, CAV 2021
- Teaching Asst. Python Bootcamp at the CRI institute (2021)
  - Teacher Research Project at Master AIRE of Digital Sciences at Université Paris Cité (2023)

#### Publications

- SAS 2024 **Quantitative Static Timing Analysis**, https://hal.science/hal-04669723 <u>Denis Mazzucato</u>, Marco Campion, and Caterina Urban
- NFM 2024 Quantitative Input Usage Static Analysis, https://doi.org/10.1007/978-3-031-60698-4\_5 Denis Mazzucato, Marco Campion, and Caterina Urban
- SAS 2021 Reduced Products of Abstract Domains for Fairness Certification of Neural Networks, https://doi.org/10.1007/978-3-030-88806-0\_15 Denis Mazzucato and Caterina Urban