

Denis Mazzucato

Ph.D. Student

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in [denis-mazzucato](#)

Education

- 2024–Feb. 2025 **Postdoc**, *Carnegie 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 **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>
[Denis Mazzucato](#), 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