Nicola Di Vittorio

Email **nicola.divittorio.1@gmail.com**
Github **divittorio**
LinkedIn **www.linkedin.com/in/nicoladivittorio**
Phone Number **+393478626567 (IT)**
+61435680538 (AU)
Website **divittorio.github.io**

EDUCATION

Ph. D. in Mathematics / Macquarie University (AU) / 2025

- Independent research on complex technical problems.
- Strong analytical and problem-solving skills.
- Quick learner of abstract and quantitative concepts.
- Excellent communication skills through teaching and conference presentations.
- Organized academic events and workshops.
- Secured competitive research funding.

M. Res. in Mathematics / Macquarie University (AU) / 2021

Degree preparatory to Ph.D. studies, awarded with 94.1 out of 100.

M. Sc. in Mathematics / University of Padova (IT) / 2019

Degree awarded with 104 out of 110.
- Completed an exchange at UCLouvain (Louvain-la-Neuve, BE).
- Involved in events organisation, including university movie nights and in-person gatherings for the Italian community of Reddit in Padova, Bologna and Torino.

B. Sc. in Mathematics / University of Bari (IT) / 2017

Degree awarded with 95 out of 110.

Studied classes in Algebra, Computer Science, Geometry, Mathematical Analysis, Physics and Probability.

PUBLICATIONS

- N. Di Vittorio, *Towards 2-derivators for formal ∞-category theory*, Advances in Mathematics, Volume 485, February 2026, 110726.
- N. Di Vittorio, *A Gray-categorical pasting theorem*, Theory and Applications of Categories, Vol. 39, 2023, No. 5, pp 150-171.
- N. Di Vittorio and G. Lobbia, *Some remarks on the interchange in Gray-categories*, arXiv: 2310.03503, 2023.

SKILLS

- Programming languages including Python, R, C, SQL.
- Markup languages including LaTeX, HTML.
- Italian: Native.
- English: Fluent.

WORK EXPERIENCE

Teaching assistant / Macquarie University / 2020 - ongoing

Teaching assistant for undergraduate courses in
- Discrete Mathematics,
- Calculus and Linear Algebra,
- Applied Statistics,
- Vector Calculus and Complex Analysis.

Graph algorithms   Regular languages   Turing machines
Numerical integration   Differential equations   t-tests
ANOVA   Linear regression   Statistical Analysis with R.

Organiser / CaCS / 2021 & 2022

Categories and Companions Symposium 2021 & 2022
Brought together an average of over 200 researchers in pure and applied Category Theory, including PhD students, postdocs, and more than 20 established professors who are world-renowned experts in the field.
Project Management   Communication

Scientific committee member / Australian Kittens / 2021

Australian Kittens 2021: **A Meeting of Early Career Researchers in Category Theory and Homotopy Theory**
A conference aimed at early career researchers in category theory, homotopy theory and related areas.
Administration   Time Management

AWARDS

- *Lift-off Fellowship*, awarded annually by the Australian Mathematical Society to PhD graduates in Mathematics based on academic merit, to support their early-career research and development.
- *PGRF with Commendation*, funding from Macquarie University to conduct research overseas (awarded an additional +10% funding above baseline).
- *Macquarie University Executive Dean's Commendation for Academic Excellence in Year 2 Master of Research.*
- *iMQRES scholarship* (full scholarship for both Master of Research and Ph.D. programs; included living allowance).
- Funding from Coimbra Group to support an exchange at UCLouvain during the Masters program.
- €5000 scholarship to support my Bachelor's studies. Awarded by the Italian Ministry of Education based on exceptional High School performance.