Riccardo Bianchini

PhD in Computer Science, with a strong academic background and focused research in graded type systems and global types. Throughout my doctoral studies and subsequent experiences, I developed strong communication skills both in technical writing and public speaking, also in international settings. I have also strengthened my ability to work in teams and manage collaborative projects, consistently approaching complex tasks with method, precision, and a goal-oriented mindset.

Contacts

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🔗 **www.riccardobianchini.com**

Languages

Italian   Mother tongue
English   B2

Other

Driver's license (Category B)

WORK EXPERIENCES

2024 - 2025 | POSTDOCTORAL RESEARCH FELLOW
University of Genoa
Conducted research on type system design to support static analysis and formal modeling of computational resources.
Contributed to technical publications and actively participated in seminars and workshops to share insights and collaborate on innovative solutions.

EDUCATION

2020 - 2024 | UNIVERSITY OF GENOA
PhD in computer science
Thesis title: Resource-awareness for Java-like languages and beyond
Supervisor: Elena Zucca (UniGe), Paola Giannini (UniUpo), Francesco Dagnino (UniGe)

2018 - 2020 | UNIVERSITY OF GENOA
Master's Degree in Computer Science
Thesis title: Global types for asynchronous networks: a coinductive approach
Thesis supervisor: Elena Zucca (UniGe), Paola Giannini (UniUpo), Francesco Dagnino (UniGe)

2015 - 2018 | UNIVERSITY OF GENOA
Bachelor's Degree in Computer Science
Thesis title: Sketching for large scale machine learning
Thesis supervisor: Lorenzo Rosasco (UniGe)

TECHNICAL SKILLS

- Software Development & Programming Languages
  - Proficient in Rust, Java, Haskell, Python, C++, C, OCaml, SWI-Prolog, and F#
- Databases
  - Relational: MySQL, PostgreSQL
  - NoSQL: MongoDB, Cassandra, Neo4j
  - Experience with Hadoop ecosystem, including HDFS and MapReduce
- Formal Analysis and Modeling
  - Modeling and analysis of complex systems using formal semantics
  - Design of resource-aware systems
  - Formal verification of properties (e.g., soundness)
- Tools and Methodologies
  - Basic knowledge of Agda
  - Practical experience with Git (GitHub), SVN, LaTeX, Markdown, and BibTeX
- Soft Skills
  - Advanced analytical skills and complex problem-solving abilities
  - Experience in research and development (R&D)

INTERPERSONAL SKILLS

Developed strong interpersonal skills through academic and collaborative research.
My research experience has shaped a broad, analytical approach to problem-solving, enabling me to deliver sustainable, timely solutions while meeting scientific and project deadlines.
I'm eager to bring this mindset to non-academic environments, where rigor, creativity, and teamwork drive meaningful innovation.

SELECTED KEY PUBLICATIONS

RESOURCE-AWARE SOUNDNESS FOR BIG-STEP SEMANTICS
Authors: Riccardo Bianchini, Francesco Dagnino, Paola Giannini, Elena Zucca
Conference: OOPSLA
Year: 2023

QUERYAGT: ASYNCHRONOUS GLOBAL TYPES IN CO-LOGIC PROGRAMMING
Authors: Riccardo Bianchini, Francesco Dagnino
Journal: Science of Computer Programming
Year: 2023

A JAVA-LIKE CALCULUS WITH HETEROGENEOUS COEFFECTS
Authors: Riccardo Bianchini, Francesco Dagnino
Journal: Theoretical Computer Science
Year: 2023

COEFFECTS FOR SHARING AND MUTATION
Authors: Riccardo Bianchini, Francesco Dagnino, Paola Giannini, Elena Zucca, Marco Servetto
Conference: OOPSLA
Year: 2022