# **FABRIZIO RUSSO**

#### Research Associate | Teaching Assistant | Consultant

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# **SUMMARY**

My background is in Economics and Statistics and, as a consultant, I have led many modelling projects for financial institutions. I then obtained my PhD from Imperial College London, funded by the UKRI (STAI CDT). Passionate about research and innovation, I am studying and developing techniques for explainable knowledge discovery, to the benefit of both academia and industry. My research interests revolve around causal discovery, argumentation and explainable AI.

## **EDUCATION**

PhD in Safe and Trusted Artificial Intelligence	☐ Full-time: Oct 2020 – Feb 2025  ✔ UK
<ul> <li>Imperial College London</li> <li>Supervisor: Prof. Francesca Toni</li> </ul>	₩ UK
hesis: Causal Discovery for Trustworthy Artificial Intelligence (isiting PhD Student at King's College London (STAI CDT)	
University of London - Birkbeck College	<b>♀</b> UK
Dissertation: Macroeconomic Modelling through VAR and VEC	
BSc in Economics of Financial Markets and Institutions (1:1) University of Rome - Tor Vergata	☐ Full-time: Oct 2009 – Oct 2012  ☐ Italy
• Dissertation: The Tobin Tax between Theoretical Wherewithal and Practical Feasibility	
Funded Exchange Program (Erasmus)  University of Madrid - Autonoma	
Offiversity of Maurita - Autonoma	₹ Spani
WORK EXPERIENCE	
WORK EXPERIENCE Research Associate	∰ Full-time: Jan 2025-present
WORK EXPERIENCE  Research Associate  Imperial College London	∰ Full-time: Jan 2025-present
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WORK EXPERIENCE  Research Associate Imperial College London  • ERC-POC grant	∰ Full-time: Jan 2025-present <b>♀</b> UK
WORK EXPERIENCE  Research Associate Imperial College London  • ERC-POC grant  • Research in Causal Discovery, Argumentation and Approximate Reasoning	<ul><li></li></ul>
WORK EXPERIENCE  Research Associate Imperial College London  • ERC-POC grant  • Research in Causal Discovery, Argumentation and Approximate Reasoning  Graduate Teaching Assistant	<ul><li></li></ul>
WORK EXPERIENCE  Research Associate Imperial College London  ERC-POC grant  Research in Causal Discovery, Argumentation and Approximate Reasoning  Graduate Teaching Assistant Imperial College London  Teaching support for Introduction to Machine Learning course  Freelance Consultant	<ul> <li>         ⊞ Full-time: Jan 2025-present</li></ul>
WORK EXPERIENCE  Research Associate Imperial College London  • ERC-POC grant  • Research in Causal Discovery, Argumentation and Approximate Reasoning  Graduate Teaching Assistant Imperial College London  • Teaching support for Introduction to Machine Learning course	<ul> <li>         ⊞ Full-time: Jan 2025-present         ♥ UK         </li> <li>         ⊞ Part-time: Oct 2021 &amp; 2022</li></ul>
WORK EXPERIENCE  Research Associate Imperial College London  • ERC-POC grant  • Research in Causal Discovery, Argumentation and Approximate Reasoning  Graduate Teaching Assistant Imperial College London  • Teaching support for Introduction to Machine Learning course  Freelance Consultant	## Full-time: Jan 2025-present  ♥ UK  ## Part-time: Oct 2021 & 2022  ♥ UK  ## Part-time: Mar 2022 - Sep 2022  ♥ UK & USA
WORK EXPERIENCE  Research Associate Imperial College London  ERC-POC grant  Research in Causal Discovery, Argumentation and Approximate Reasoning  Graduate Teaching Assistant Imperial College London  Teaching support for Introduction to Machine Learning course  Freelance Consultant Imperial College Consultants (ICON)	<ul> <li>         ⊞ Full-time: Jan 2025-present         ♥ UK         </li> <li>         ⊞ Part-time: Oct 2021 &amp; 2022</li></ul>

• Research on back-door poisoning attacks identification for transformer-based Large Language Models

#### Head of Data Science

**4most Europe Ltd** 

## Full-time: Feb 2018 - Sep 2020

- Research Lead Replicate Underwriter Behaviour using Machine Learning
- Research Lead Commercial Credit Risk Scoring using Machine Learning

Research Lead - Design, prototype and build an interactive monitoring tool (Tech of the Year - National Credit Awards '22)

Managing Consultant

4most Europe Ltd

## Full-time: Jul 2016 - Jan 2018

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UK & Canada

**♀** UK

Credit Risk Consultant

## Full-time: Jul 2015 - Jun 2016

**4most Europe Ltd** 

**9** UK

Credit Risk Analyst

**General Electric Capital - UK Home Lending** 

☐ Full-time: May 2014 – Jun 2015

☑ UK

### **PUBLICATIONS**

#### Conference Proceedings

- Russo, Fabrizio and Francesca Toni (2025). "Shapley-PC: Constraint-based Causal Structure Learning with a Shapley Inspired Framework". In: Proceedings of the 5th Conference on Causal Learning and Reasoning, CLeaR 2024, Lousanne, Switzerland. May 7-9, 2025. Forthcoming.
- Russo, Fabrizio, Anna Rapberger, and Francesca Toni (2024). "Argumentative Causal Discovery". In: Proceedings of the 21st International Conference on Principles of Knowledge Representation and Reasoning, KR 2024, Hanoi, Vietnam. November 2-8, 2024.
- Leofante, Francesco, Hamed Ayoobi, Adam Dejl, Gabriel Freedman, Deniz Gorur, Junqi Jiang, Guilherme Paulino-Passos,
  Antonio Rago, Anna Rapberger, Fabrizio Russo, Xiang Yin, Dekai Zhang, and Francesca Toni (Aug. 2024). "Contestable Al
  Needs Computational Argumentation". In: Proceedings of the 21st International Conference on Principles of Knowledge
  Representation and Reasoning, KR 2024, Hanoi, Vietnam. November 2-8, 2024, pages 888–896.
- Russo, Fabrizio and Francesca Toni (2023). "Causal Discovery and Knowledge Injection for Contestable Neural Networks".
   In: ECAI 2023 26th European Conference on Artificial Intelligence, September 30 October 4, 2023, Kraków, Poland.
   Volume 372. Frontiers in Artificial Intelligence and Applications. IOS Press, pages 2025–2032.
- Russo, Fabrizio (2023). "Argumentation for Interactive Causal Discovery". In: Proceedings of the 32nd International Joint Conference on Artificial Intelligence, IJCAI 2023, 19th-25th August 2023, Macao, SAR, China. ijcai.org, pages 7091–7092.
- Rago, Antonio, Fabrizio Russo, Emanuele Albini, Pietro Baroni, and Francesca Toni (2021). "Forging Argumentative
  Explanations from Causal Models". In: Proceedings of the 5th Workshop on Advances in Argumentation in Artificial Intelligence
  2021 co-located with the 20th International Conference of the Italian Association for Artificial Intelligence (AIXIA 2021).
   Volume 3086. CEUR Workshop Proceedings. CEUR-WS.org.

#### Journal Articles

Rago, Antonio, Fabrizio Russo, Emanuele Albini, Pietro Baroni, and Francesca Toni (2023). "Explaining Classifiers' Output with Causal Models and Argumentation". In: Journal of Applied Logics — IfCoLog Journal of Logics and their Applications, Special Issue: Advances in Argumentation in Al 10.3, pages 421–449.

#### Working Papers

Bengel, Lars, Lydia Blümel, Elfia Bezou-Vrakatseli, Federico Castagna, Giulia D'Agostino, Isabelle Kuhlmann,
 Jack Mumford, Daphne Odekerken, Fabrizio Russo, Stefan Sarkadi, Madeleine Waller, and Andreas Xydis (2024). Online Handbook of Argumentation for Al: Volume 4. arXiv: 2401.09444.

# **SERVICE**

- XAI-FIN at ICAIF '24 (Assistant Chair)
- ICLR '25 (Reviewer)
- NEURIPS '24 (Reviewer)
- AISTATS '24 (Reviewer)
- XAI-FIN at ICAIF '23 (Assistant Chair)
- ECAI '23 (Reviewer)
- AISTATS '23 (Top-Reviewer Award)

- BSKY at AAMAS '23 (Reviewer)
- AISTATS '22 (Reviewer)
- ICML '22 (Reviewer)
- XAI-FIN at ICAIF '22 (Workshop co-organiser)
- XAI-FIN at ICAIF '21 (Reviewer)
- XAI Seminars Series @ Imperial (Co-organiser)