# Giovanni Varricchione

# Personal info

**Address:** Buys Ballotgebouw 5.24, Princetonplein 5, Utrecht, Netherlands

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## **Education**

#### **Universiteit Utrecht**

March 2021 - February 2026 (expected end date)

PhD in Formal Modelling of Intelligent Agents and Multi-Agent Systems

- Intelligent Systems Group
- Supervised by Prof. Dr. Mehdi Dastani and Dr. Brian Logan
- My research focuses on applying formal methods to reinforcement learning

#### Universiteit van Amsterdam

September 2019 - April 2021

MSc in Logic

- Thesis: Complexity of Locally Fair Allocations on Graphs
- GPA: 8.97/10 (cum laude)

# Università degli Studi di Roma "La Sapienza"

September 2018 - August 2019

MSc in Computer Science (not completed)

 Classes taken: Models of Computation, Machine Learning, Mathematical Logic for Computer Science, Biometric Systems, Natural Language Processing

## Università degli Studi di Roma "La Sapienza"

September 2015 - October 2018

BSc in Computer Science

- Thesis title: Automatic Versions of Combinatorics Theorems
- Grade: 110/110 (cum laude)

# **Publications**

#### **Maximally Permissive Reward Machines**

GV, Natasha Alechina, Mehdi Dastani, and Brian Logan. To appear in *Proceedings of the 27th European Conference on Artificial Intelligence (ECAI 2024)*.

# **Pure-Past Action Masking**

GV, Natasha Alechina, Mehdi Dastani, Giuseppe De Giacomo, Brian Logan, and Giuseppe Perelli. In Proceedings of the 38th AAAI Conference on Artificial Intelligence (AAAI 2024); Safe, Robust and Responsible AI track.

#### Synthesising Reward Machines for Cooperative Multi-Agent Reinforcement Learning

GV, Natasha Alechina, Mehdi Dastani, and Brian Logan. In *Proceedings of the 20th European Conference on Multi-Agent Systems (EUMAS 2023)*.

# **Grants and Scholarships**

## **ASL** travel support

2024

I was awarded a scholarship to attend the Logic Colloquium in June 2024. The scholarship covers the registration and banquet fees (4170 SEK).

# **TAILOR Connectivity Fund**

2022

The funding was used to visit the group of professor Giuseppe De Giacomo in Rome, in July 2022.

# **Organisational Experience**

VvL PhD day

21st June 2024

I'm part of the organising committee for the 2024 edition of the VvL PhD day.

**VvL Essentials** 

2023-

I'm one of the organisers of the VvL Essentials seminars. In the seminars, we invite researchers from various Dutch universities to give high-level lectures on their topics of research that are related to logic and its applications.

# Personal skills

Languages Italian (native)

English (fluent)

Dutch (beginner)

Programming

Languages

C, C++, Java, Python