

JOSEPHINE DIK

Ph.D. STUDENT

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<http://www.josephinedik.github.io/>

RESEARCH INTERESTS

deontic logic, legal reasoning, answer set programming, first-order modal logic, judicial discretion, preference logic, description logic, artificial intelligence, paradoxes

EDUCATION

Ph.D. in Logic and Computer Science

Theory and Logic Group, Department of Computer Science

Austria, Vienna
2022 - 2026 (expected)

- Advisor: Prof. Agata Ciabattoni
- Research area: Applications of Deontic Logic

Master in Logic

University of Gothenburg

Gothenburg, Sweden
2020 - 2022

- Thesis: Proof Theory of Circular Description Logics
- Advisor: Prof. Bahareh Afshari

Bachelor in Liberal Arts & Science

Amsterdam University College

Amsterdam, the Netherlands
2015 - 2018

- Track: Computer Science, and Mathematics
- Thesis: Infinite Time Turing Machines and Ordinal Turing Machines – Comparison and Analysis

Exchange Semester

Chinese University of Hong Kong

Hong Kong
Sep. 2017 - Jan. 2018

EMPLOYMENT

University Assistent | TU Wien | Vienna

2022-Present

Coach | Bit Academy | Amsterdam, the Netherlands

2020

- Coaching students in programming, explaining concepts and motivating the students.

Trainer | Lyceo | Amsterdam, the Netherlands

2020

- Trainer for secondary school students, where I worked on a wide variety of projects including home work guidance, tutoring and training for exams.

Software Developer | ING & Young Colfield | Amsterdam, the Netherlands

2018-2019

- Part of the Kafka Eventbus team of ING. This team maintains the internal Kafka Cluster and develops new features. The first 12 months of this project were part of an IT traineeship at Young Colfield. After that, I worked for ING internally.

AWARDS & GRANTS

- Short list best paper award, PRIMA 2025
- Runner up best paper award, DEON 2023
- Best Posters Award, SPLogIC 2023
- Conference Attendance Grant for female master's students, TU Wien Informatics 2025

SKILLS

Languages: Dutch, English.

Programming: Python, Answer Set Programming, MATLAB, Java, JavaScript, HTML, CSS, Matlab, Pyret, C, Prolog

- Certificates Oracle Certified Associate Java SE 8 Programmer, Professional Scrum Master 1

ACADEMIC SERVICES

Organizing WiL Seminar Series

Reviewers for AAAI 2025, DEON 2025, AAAI 2026

Student Representative LogiCS@TUVien programme

Organizing Committee DEON2025, MOSAIC2023

**SELECTED
TALKS**

DEON 2025, Vienna, Austria	2025
Title: <i>New sources for deontics: The Mimamsa school of Sanskrit philosophy</i>	
• Together with Elisa Freschi	
ICAIL 2025, Chicago, USA	2025
Title: <i>Judicial Discretion as Normative Reasoning: Deontic Characterization of Judicial Decision Making with Answer Set Programming.</i>	
• Together with Réka Markovich	
JURIX 2024, Brno, Czech	2025
Title: <i>Modeling Judicial Discretion with Nuanced Permissions.</i>	
• Together with Réka Markovich	
DEON 2023, Trois-Rivieres, Canada	2025
Title: <i>Disambiguating Permissions: A Contribution from Mimamsa.</i>	

PUBLICATIONS

1. Agata Ciabattoni, Josephine Dik, Emiliano Lorini, Dominik Pichler, Dmitrii Rozplokhin. From Explicit Allowances to Defeasible Deontic Operators: A Modal View. In: *Proceedings of the 26th International Conference on Principles and Practice of Multi-Agent Systems (PRIMA 2025)*, December 2025.
2. Josephine Dik. Explaining Discretionary Judicial Decisions using Answer Set Programming. In: *Legal Knowledge and Information Systems (JURIX 2025)*, December 2025.
3. Josephine Dik, Réka Markovich. When Judges Go Wrong: Modeling Discretion and the Duty of Care (Extended Abstract). In: *Proceedings of the 17th International Conference on Deontic Logic and Normative Systems (DEON 2025)*, July 2025.
4. Josephine Dik, Dominik Pichler. Navigating Permission and Exceptions: A First-Order Perspective. In: *Proceedings of the 17th International Conference on Deontic Logic and Normative Systems (DEON 2025)*, July 2025.
5. Josephine Dik, Réka Markovich. Judicial Discretion as Normative Reasoning: Deontic Characterization of Judicial Decision Making with Answer Set Programming. In: *International Conference on AI and Law (ICAIL 2025)*, June 2025.
6. Agata Ciabattoni, Josephine Dik, Elisa Freschi. Mimamsa on 'better-not' permissions. In: *Journal of Philosophical Logic*, 2025.
7. Josephine Dik, Réka Markovich. Modeling Judicial Discretion with Nuanced Permissions. In: *Legal Knowledge and Information Systems (JURIX 2024)*, December 2024.
8. Agata Ciabattoni, Josephine Dik, Elisa Freschi. Disambiguating permission: A contribution from Mimamsa. In: *Proceedings of the 16th International Conference on Deontic Logic and Normative Systems (DEON 2023)*, July 2023.

STAYS ABROAD

Visiting Réka Markovich University of Luxembourg	June, October-November 2024
Visiting Marcelo Coniglio Universidade Estadual de Campina	February 2023

**SUMMER
SCHOOLS**

SPLogiC Campinas, Brazil	2023
Proof Society Atumun School and Workshop. Utrecht, Netherlands	2022
Logic for the AI Spring Como, Italy	2022
Nordic Logic Summer School Bergen, Norway	2022

VOLUNTEERING

Event Coordinator Gota Studentkar	2022
Teacher Dutch Language for Adults Het Claverhuis	2020
Buddy Exchange Students Amsterdam University College	2018