

# Ivana Bocevska

## Curriculum Vitae

TU Wien Informatics, Vienna Austria

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in [www.linkedin.com/in/ivana-bocevska](https://www.linkedin.com/in/ivana-bocevska)

Nationality - Macedonian

### Education

- 2025–present **PhD-Student**, *TU Vienna*  
Doctoral School of Automated Reasoning, FORSYTE Group
- 2023–2025 **Master in Logic and Computation**, *TU Vienna*, **GPA 1.0** (highest grade)  
Thesis: Extending Game-Theoretic Security of Blockchain Protocols with Compositional Reasoning and Conditional Actions
- 2019–2023 **BSc Software and Information Engineering**, *TU Vienna*, **GPA 1.1** (highest grade 1.0)  
Thesis: Gentzen-type Refutation Systems for Connexive Logics

### Experience

- 03.2025–  
07.2025 **Research Internship**, *National Institute of Informatics*, Tokyo, Japan  
Research Topic: Lagrangian-based duality for quantified SMT solving.
- 02.2024–  
02.2025 **Research Assistant**, *TU Vienna, Institute of Logic and Computation*, Vienna, Austria  
Research Topic: Compositionality Techniques for improved scalability of the game-theoretic analysis of blockchain protocols.
- 07.2021–  
03.2025 **Solution Engineer**, *BOC Group*, Vienna, Austria  
Responsibilities: development of tailored solutions for the customers, mainly in the financial industry; supporting customers in regards of technical questions; active contribution in the product development of the company's tool suite, consulting, involved in end-to-end solution development.

### Honors and Awards

- 12.2025 Merit-Based Scholarship – Vienna University of Technology (1,000 EUR)
- 12.2024 **Siemens Award for Excellence** – Vienna University of Technology & Siemens AG Austria (1,000 EUR)
- 06.2024 **Helmut Veith Stipend** – Vienna Center for Logic and Algorithms (6,000 EUR)
- 12.2023 **Siemens Award for Excellence** – Vienna University of Technology & Siemens AG Austria (1,000 EUR)
- 12.2020 **Siemens Award for Excellence** – Vienna University of Technology & Siemens AG Austria (1,000 EUR)
- 04.2019 **Silver Medal Infomatrix World Finals** – Informatix International Computer Science Project Olympiad in Romania
- 04.2017 **Bronze Medal Infomatrix World Finals** – Informatix International Computer Science Project Olympiad in Romania
- 03.2019 3rd Place National Computer Science Competition in North Macedonia
- 03.2018 3rd Place National Computer Science Competition in North Macedonia
- 03.2018 3rd Place National Mathematics Competition in North Macedonia

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## Publications\*

- 2025 **Divide and Conquer: A Compositional Approach to Game-Theoretic Security**  
*Ivana Bocevska, Anja Petković Komel, Laura Kovács, Sophie Rain, Michael Rawson*  
ACM SIGPLAN Conference on Object-Oriented Programming, Systems, Languages, and Applications, **OOPSLA'25**, [doi](#).
- 2026 **Lagrangian-Based Duality for Quantified SMT Algorithms**  
*Ivana Bocevska, Takeshi Tsukada, Hiroshi Unno, Oded Padon, Sharon Shoham*  
*under submission*

\* Following the global norms of Mathematics and Theoretical Computer Science, author names appear in alphabetical order. In Computer Science, conference papers are the primary peer-reviewed venue, often more prestigious than journal articles.

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## Teaching Experience\*\*

- Summer term 2026 **Teaching Assistant**, *Vienna University of Technology*  
Courses:  
○ Logic and Reasoning in Computer Science
- Winter term 2023 **Teaching Assistant**, *Vienna University of Technology*  
Courses:  
○ Introduction to Knowledge Based Systems
- Summer term 2023 **Teaching Assistant**, *Vienna University of Technology*  
Courses:  
○ Introduction to Knowledge Based Systems  
○ Introduction to Artificial Intelligence
- Winter term 2022 **Teaching Assistant**, *Vienna University of Technology*  
Courses:  
○ Introduction to Knowledge Based Systems  
○ Declarative Problem Solving
- Summer term 2022 **Teaching Assistant**, *Vienna University of Technology*  
Courses:  
○ Introduction to Artificial Intelligence  
○ Formal Modeling  
○ Introduction to Programming 1
- Winter term 2021 **Teaching Assistant**, *Vienna University of Technology*  
Courses:  
○ Theoretical Computer Science and Logic  
○ Introduction to Programming 1
- Summer term 2021 **Teaching Assistant**, *Vienna University of Technology*  
Courses:  
○ Formal Modeling  
○ Introduction to Programming 1
- Winter term 2020 **Teaching Assistant**, *Vienna University of Technology*  
Courses:  
○ Introduction to Programming 1
- Summer term 2020 **Teaching Assistant**, *Vienna University of Technology*  
Courses:  
○ Introduction to Programming 1

\*\* Undergraduate and graduate courses from the curricula Software & Information Engineering and Logic and Computation. Responsibilities: correcting exams/exercise sheets, contribution to the creation of exams, exercise sheets, and study materials, consultation hours for students, performing oral examinations.

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## Invited & Conference Talks

- 10.2025 **Automated Game-Theoretic Security Analysis of Blockchain Protocols**  
12th Workshop on Formal Reasoning in Distributed Algorithms, **FRIDA'25**, Berlin, Germany  
Recording: [link](#)
- 10.2025 **Divide and Conquer: A Compositional Approach to Game-Theoretic Security**  
ACM SIGPLAN Conference on Object-Oriented Programming, Systems, Languages, and Applications, **OOPSLA'25**, Singapore  
Recording: [link](#)

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## Research Visits

- 03.2025–  
07.2025 National Institute of Informatics (NII), Tokyo, Japan

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## Conferences & Workshops Attended

- OOPSLA'25 ACM SIGPLAN Conference on Object-Oriented Programming, Systems, Languages, and Applications, OOSPLA'25, Singapore
- FRIDA'25 12th Workshop on Formal Reasoning in Distributed Algorithms, FRIDA'25, Berlin, Germany
- MOD'25 Marktoberdorf Summer School on Specification and Verification for Secure Cyberspace, Marktoberdorf, Germany

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## Languages

Full professional  
proficiency

- English
- German

Native  
proficiency

- Macedonian

Elementary  
proficiency

- Bulgarian
- Turkish

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## Social Engagement & Volunteering

- 2026 Representative of graduate students in “Women in Informatics”-initiative and strategy building, TU Vienna
- 2026 Mentoring and organization of Girls Hackathon in cooperation with TU Vienna and City of Vienna
- 2025-2026 CS-unplugged Workshops for young children
- 2022 Workshops for young female students, “Algorithmen Denken Anders - Tagebuch der Informatikerin”-initiative, Vienna Center for Logic and Algorithms
- 2021 Speedmentoring for young female students, “Algorithmen Denken Anders - Tagebuch der Informatikerin”-initiative, Vienna Center for Logic and Algorithms
- 2017 Voluntary work at Austrian Honorary Consulate in Bitola, North Macedonia
- 2017 Voluntary work at Society for Macedonian-German Friendship and Cooperation in Bitola, North Macedonia