

Radu Vintan

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Education

2022-present **Ph.D. in Computer Science**, *EPFL* Advisor: Ola Svensson

- 2020–2022 Master's in Informatics, Technical University of Munich (TUM), GPA: 1.0/1.0
- 2017–2020 Bachelor's in Informatics, Technical University of Munich (TUM), GPA: 1.0/1.0

Research Interests

I am currently interested in studying and researching: approximation and online algorithms, linear programming and its use in designing efficient algorithms.

Other interests include, in non-increasing order of proficiency: machine learning, complexity theory, convex optimization, functional programming languages.

Publications

Deterministic Online Bipartite Edge Coloring

Joakim Blikstad, Ola Svensson, Radu Vintan, David Wajc. SODA 2025.

Online Edge-Coloring is (Nearly) as Easy as Offline

Joakim Blikstad, Ola Svensson, Radu Vintan, David Wajc. STOC 2024.

Simple and Asymptotically Optimal Online Bipartite Edge Coloring Joakim Blikstad, Ola Svensson, Radu Vintan, David Wajc. SOSA 2024.

Fast Algorithms for Loop-Free Network Updates using Linear Programming and Local Search

Radu Vintan, Harald Räcke, Stefan Schmid. INFOCOM 2024.

Projects and practical work

2022 Distributed Information Systems Projects (EPFL)

As part of this course at EPFL, me and two other PhD students worked on three projects, involving the following topics: text retrieval, recommender systems and named entity disambiguation.

2022 Road Segmentation Project (EPFL)

As part of the *Machine Learning* course at EPFL, me and two other PhD students implemented and trained an U-Net neural network to identify roads in satellite images. We also tested the effectiveness of various data augmentations.

2021-2022 Guided Research Project (TUM)

Supervisor: Prof. Harald Räcke I developed heuristic and competitive algorithms for the Dynamic Minimum Linear Arrangement Problem.

2021-2022 Interdisciplinary Project (TUM)

Supervisors: PD Dr. René Brandenberg, Wolfgang F. Riedl I worked on applying the Revised Normal Boundary Intersection (RNBI) method for multicriteria optimization problems to a manpower planning problem.

2019-2020 Practical Course: Algorithms for Programming Contests (TUM) In this course, I practiced solving competitive programming problems.

Teaching

2023-2024 Algorithms Courses (EPFL)

Since 2023, I have served as a teaching assistant in each semester for either Algorithms 1 (Introduction to Algorithms) or Algorithms 2 (Advanced Algorithms) at EPFL.

Awards and Scholarships

2022-2023 EPFL Ph.D. Fellowship

The fellowship allows Ph.D. students in Computer Science at EPFL to explore different research labs through semester projects during their first year.

2022 SAP Student Award

The award is offered by SAP for an excellent Master's Thesis in Informatics at TUM.

2018 best.in.tum

Became a member of best.in.tum: a program which promotes the best two percent of students studying Informatics at TUM.

2017-2022 DAAD Scholarship

Received a scholarship from the German Academic Exchange Service (DAAD) for my Bachelor's in Informatics. The scholarship was later extended for my Master's.

2017 6th place, Romanian Mathematics Olympiad (RMO)

Received a silver medal (12th Grade). Participated at the first selection round (out of five) for the national team for the IMO (International Mathematical Olympiad).

2016 **3rd place, Romanian Mathematics Olympiad (RMO)**

Received a gold medal (11th Grade). Participated at the first selection round (out of five) for the national team for the IMO.

Languages

German C1 (DSD II Zertifikat) English C2 (Cambridge Certificate) Romanian native

Computer skills

Moderate experience from university projects or competitive programming with following languages:

○ Java, Python (also NumPy, SciPy, Pytorch), C++

Basic acquaintance with: o OCaml, Haskell, Javascript