

Miguel Bosch Calvo

✉ miguel.boschcalvo@idsia.ch

List of Publications

- **An $O(\log \log n)$ -Approximation for Submodular Facility Location** | Fateme Abbasi, Marek Adamczyk, Miguel Bosch-Calvo, Jarosław Byrka, Fabrizio Grandoni, Krzysztof Sornat, and Antoine Tinguely | ICALP2024
- **A $4/3$ Approximation for 2-Vertex-Connectivity** | Miguel Bosch-Calvo, Fabrizio Grandoni, and Afrouz Jabal Ameli | ICALP2023 (Best paper award)
- **An Improved Kernel for the Flip Distance Problem on Simple Convex Polygons** | Miguel Bosch-Calvo, and Steven Kelk | Information Processing Letters (A preliminary version appeared in CCCG 2021)
- **A $5/4$ Approximation for Two-Edge-Connectivity** | Miguel Bosch-Calvo, Mohit Garg, Fabrizio Grandoni, Felix Hommelsheim, Afrouz Jabal Ameli and Alexander Lindermayr | Accepted to STOC2025
- **A PTAS for Triangle-Free 2-Matching** | Miguel Bosch-Calvo, Fabrizio Grandoni, and Afrouz Jabal Ameli | Manuscript

Education

Ph. D. in Computer Science

Istituto Dalle Molle di Studi sull'Intelligenza Artificiale (IDSIA, USI-SUPSI)

Jan. 2022 – Now

Lugano, Switzerland

- Under the supervision of Prof. Fabrizio Grandoni <https://people.idsia.ch/~grandoni/>.
- The main field of study is approximation algorithms for survivable network design.
- Expected graduation date: 12/25.

Master in Data Science for Decision Making

Maastricht University

Feb. 2020 – June 2022

Maastricht, The Netherlands

- Graduated cum laude.

Master in Industrial Engineering

Polytechnic University of Valencia

Sep. 2017 – July 2019

Valencia, Spain

Bachelor in Engineering in Industrial Technologies

Polytechnic University of Valencia

Sep. 2013 – June 2017

Valencia, Spain

Experience

Rudo. App development for IOS and Android

Internship as a Software Engineer (Back-end Developer)

Jan. 2019 – July 2019

Valencia, Spain

- Rudo is a tech company specializing in consulting and developing mobile apps.
- Worked as an intern developing back-ends with Django Rest Framework for Python.

Teaching

Teaching Assistant

Scuola Universitaria Professionale della Svizzera Italiana (SUPSI)

Jan. 2022 – Now

Lugano, Switzerland

- Courses: **Advanced Algorithms and Data Structures** and **Approximation Algorithms**.

Teaching Assistant

Maastricht University

Sep. 2020 – Dec. 2020

Maastricht, The Netherlands

- Courses: **Discrete Mathematics** and **Linear Programming**.

Other Information / Extracurricular

Languages

- **English:** English Exams – Certificate in Advanced English (CAE) – C1
- **Catalan:** Official Mitjà Exam – C1
- **Spanish:** Native Spanish speaker

Volunteering at a Scout Group

Sep. 2004 – July 2018

- Member of a Scout group during 14 years, first as a member and later as a volunteer. Scout leader during 4 years and Scout leader coordinator during 1 year.