

Jakob Nogler

Email jakob.nogler@gmail.com
Languages Italian (Native), German (Native), English (Fluent)

Education

Fall 2023 **Princeton University**, Exchange Semester in Computer Science
2022 / current **ETH Zurich**, Computer Science MSc - *Current GPA: 5.82/6.0*
Fall 2021 **Massachusetts Institute of Technology**, Exchange Semester in Computer Science
2019 / 2022 **ETH Zurich**, Computer Science BSc - *GPA: 5.93/6.0, graduated with merit*
2014 / 2019 **L.S. Galileo Galilei Trento**, Scientific High School - *Final grade: 100/100*

Research and Teaching

- **Teaching Assistant at ETH Zurich**
 - Held weekly tutorial sessions, corrected graded assignments, and provided support for student inquiries.
 - Undergraduate course *Algorithms and Probability* (twice) and Graduate course *Computer Intelligence Lab*.
- **Reviewed for SPIRE and ICALP (x2)**
- **Summer Intern at Max-Planck Institute for Informatics** 2023-06 / 2023-08
 - Research on approximate pattern matching with Dr. Kociumaka and Prof. Wellnitz (ongoing collaboration).
 - Research on fine-grained complexity related questions with Prof. Polak (ongoing collaboration).
 - Attend weekly seminars and ADFOCS 2023.
- **Summer Intern at Institute of Science and Technology Austria - Funded through OeAD** 2022-06 / 2022-09
 - Research on promised colorings of directed graphs with Prof. Jakub Opršal.
 - Attend weekly seminars in Prof. Wagner's group.
- **Undergraduate Research Opportunity Program at MIT** 2021-09 / 2021-12
 - Research on quantum string algorithms with Ce Jin in the group of Prof. Vassilevska Williams.

Software Development

- **WebValley 2018** 2018-06 / 2018-07
 - Developed predictive oncogenomics models and privacy-by-design through deep learning and blockchain.
- **Application developer at Fondazione Bruno Kessler** 2017-06 / 2017-07
 - Designed and implemented an augmented reality-based application to visualize point clouds of WWI.

Publications

- **The Geometry of Cyclical Social Trends**
B. Chazelle, K. Karntikoon, and J. Nogler - *Preprint on ArXiv*
- **On the Communication Complexity of Approximate Pattern Matching**
T. Kociumaka, J. Nogler, and P. Wellnitz - *Accepted at STOC 2024*
- **Quantum Speed-ups for String Synchronizing Sets, LCS, and k-mismatch Matching** Students Paper
C. Jin and J. Nogler - *Accepted and presented at SODA 2023*

Competitions and Awards

ICPC Greater NY Regional Contest. Participated representing Princeton University. 2023-11
ICPC Southwestern European Regional Contest. Participated representing ETH Zurich. 2023-02
International Olympiad in Informatics. Participation to IOI 2019 representing Italy. 2019-08
Central European Olympiad in Informatics. Bronze Medal at CEOI 2019 representing Italy. 2019-08
Italian Olympiad in Informatics. Silver Medal at OII 2019. 2018-09
European Union Science Olympiad. Silver Medal at EUSO 2017 (gold medal at national level). 2017-05
Italian Olympiad in Informatics in Teams. 2nd (2017), 6th (2018) and 4th (2019) place. 2017/18/19-02