Jakob Nogler

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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*

Research and Teaching

- **Teaching Assistant, ETH Zurich**
  - Held weekly tutorial sessions, corrected graded assignments, and provided support for student inquiries.
  - Held positions for undergraduate course *Algorithms and Probability* (Spring 2022 & 2023) and graduate courses *Computer Intelligence Lab* (Spring 2024) and *Advanced Algorithms* (Fall 2024).

- **Conference Reviewer for FSTTCS, ICALP (x2) and SPIRE**

- **Summer Intern, Max-Planck Institute for Informatics**   2023-06 / 2023-08
  - Conducted research on approximate pattern matching with Prof. Kociumaka & Prof. Wellnitz (ongoing collaboration) and on fine-grained complexity related questions with Prof. Polak (ongoing collaboration).
  - Attend weekly seeminars and ADFOCS 2023.

- **Summer Intern, Institute of Science and Technology Austria**   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, MIT**   2021-09 / 2021-12
  - Research on quantum string algorithms with PhD student Ce Jin in the group of Prof. Vassilevska Williams.

Software Development

- **Software Engineering Summer Intern, Lifeware AG, Zurich**   2024-06 / 2024-09
  - Unified the existing transaction system across fifteen different banks to make it suitable for verification by insurance clients and for automated controls. Collaborated directly with insurance clients to integrate two additional banks.

Publications

- **The Geometry of Cyclical Social Trends**
  B. Chazelle, K. Karntikoon, and J. Nogler | *Accepted and to be presented at CDC 2024*

- **On the Communication Complexity of Approximate Pattern Matching**
  T. Kociumaka, J. Nogler, and P. Wellnitz | *Accepted and presented at STOC 2024* | *Presented at HALG 2024*

- **Quantum Speed-ups for String Synchronizing Sets, LCS, and k-mismatch Matching**
  C. Jin and J. Nogler | *Accepted and presented at SODA 2023* | *Journal version accepted at TALG* | *Student Paper*

Competitions and Awards

- **International Collegiate Programming Competitions:** Selected to represent Princeton University at *ICPC Greater NY Regional Contest 2023* and to represent ETH Zurich at *ICPC Southwestern European Regional Contest 2023*.

- **International ans National High-School Level Programming Competitions:** Represented Italy at the *International Olympiad in Informatics 2019* and the *Central European Olympiad in Informatics 2019* (bronze medal), following the Italian Olympiad in Informatics 2019 (silver medal).

- **Biology Competitions at High-School Level:** Represented Italy at the European Union Science Olympiad 2017 (silver medal), following the national selection contest (gold medal).