



University of  
Zurich<sup>UZH</sup>

algomia

# Randomized & Online Algorithms

BMINF14

University of Zürich

Fall Term 2020

Dr. Alexander Souza  
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# Agenda

**alGOMia**

- › Lecturer
- › Course
- › Lecture
- › Exercises
- › Exam

# Lecturer

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- › PD Dr. Alexander Souza
- › Email: [alexander@algomia.com](mailto:alexander@algomia.com)
- › Web: <https://algomia.com>
- › Short Bio
  - › Studies: Computer Science & Mathematics
  - › Expertise: Algorithms, Optimization, Data Science
  - › Academics: TU München, Rensselaer Polytechnic, ETH Zürich, U Freiburg, HU Berlin
  - › Entrepreneur: Founder algomia



# Course

- › Randomized & Online Algorithms
- › Online-only course via OLAT/Zoom
- › Web: <https://algomia.com/teaching.html>
- › Course schedule published on homepage
- › Lecture:
  - › Start: 17.9.2020, end: 18.12.2020
  - › Thursday, 8:15-9:45
  - › Friday, 8:15-9:45
- › Exercises:
  - › Biweekly, schedule on course homepage
- › ECTS: 6

- › Lecture notes are provided in OLAT
- › Topics
  - › Randomized Algorithms
    - › Linearity of Expectation
    - › Bounds on Probabilities
    - › Markov Chains
    - › Randomized Rounding
    - › Probabilistic Method
  - › Online Computation
    - › Load Balancing
    - › Bin Packing
    - › List Update

- › Dates given in course schedule
- › Sheets out soon
- › During session, solution to exercises will be presented
- › No hand-in of sheets required, i.e. participation is optional

# Exam

- › Online oral exam
- › Dates: 14./15.1.2021
- › Details to be announced

# Contact Us

**algomia**

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