

KAYA ITO ALPTÜRER

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EDUCATION

- Princeton University** Fall 2023 - Present
PhD - Theoretical Computer Science
- Cornell University - College of Arts and Sciences** Fall 2019 - Spring 2023
B.A. - Mathematics and Computer Science **GPA 4.176/4.3**

RESEARCH EXPERIENCE

- Research in Mechanism Design for Cryptocurrencies** Fall 2023 - Present
Advised by Prof. Matt Weinberg
Princeton University
- Research in Fault-tolerant Distributed Algorithms** Summer 2021 - Spring 2023
Undergraduate Research Assistant
Cornell University
- Investigated Byzantine consensus protocols under different failure assumptions with the help of an epistemic model checker called MCK with Prof. Joseph Y. Halpern and Prof. Ron van der Meyden.

PUBLICATIONS

- Optimal Eventual Byzantine Agreement Protocols with Omission Failures** PODC 2023
Kaya Alpturer, Joseph Y. Halpern, Ron van der Meyden
Orlando, Florida

TEACHING EXPERIENCE

- CS 412[01] - Introduction to Compilers** Spring 2022
Undergraduate Teaching Assistant
Cornell University
- Prepared programming assignments and held office hours. Performed benchmarking analysis on student compilers. Helped organize a recitation that covered assembly programming in x86.
- CS 4820 - Introduction to Analysis of Algorithms** Spring 2021
Undergraduate Teaching Assistant
Cornell University
- Assisted in CS 4820 by grading problem sets and providing teaching support covering topics ranging from algorithm design techniques to undecidability and NP-completeness.
- CS 2112 - Honors Object-Oriented Programming and Data Structures** Fall 2020
Undergraduate Consultant
Cornell University
- Developed and graded programming assignments in Java on topics ranging from the fundamentals of object-oriented design to data structures as a course staff member.

EXTRACURRICULAR ACTIVITIES

- CodeFest '16 – '22** Fall 2016 - Present
Co-founder - Contest Manager ('16-'19) - Alumni Advisor ('20 - Present)
Istanbul, Turkey
- Co-founded and advised the largest nation-wide high-school programming contest in Turkey. As an alumnus, still responsible for preparing contest challenges in the annual event.

ACHIEVEMENTS

- Phi Beta Kappa** Honor Society, Theta Chapter of New York at Cornell University. (*Spring 2022*)
- Dean's List** in the College of Arts and Sciences at Cornell University. (*Fall 2019 - Spring 2023*)
- Honorable Mention** in the Compilers Bakeoff, for the compilers course 412[01]. (*Spring 2021*)
- Top 50** in the Turkish National Science Olympiad (Computer Science). (*June 2017, 2018*)

PERSONAL SKILLS AND INTERESTS

- Fluent in Turkish, Japanese, and English
- Programming Languages: OCaml, Python, Java, L^AT_EX
- Interests: Billiards, Chess, Soccer