Utkan Gezer

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Education

- **PhD**, Computer Engineering, Boğaziçi University, İstanbul (2020–2026)
  Thesis: *Verifying debates and proofs using constant space and constant private randomness.*
  Advisor: A. C. Cem Say
- **MSc**, Computer Engineering, Boğaziçi University, İstanbul (2018–2020)
  Thesis: *Constant-space, constant-randomness verifiers with arbitrarily small strong error.*
  Advisor: A. C. Cem Say
- **BSc**, Computer Engineering, Boğaziçi University, İstanbul (2013–2018)
- **Abitur**, İstanbul Erkek Lisesi, İstanbul (2007–2012)

Academic Appointments

- **Teaching/Research Assistant**, Computer Engineering, Boğaziçi University, İstanbul (Apr 2019–present)
- **Student Teaching Assistant** (part-time), Computer Engineering, Boğaziçi University, İstanbul (2014–2017)

Journal Articles

SG25 A. C. Cem Say, M. Utkan Gezer. "Unconditional Proofs of Quantumness Between Small-Space Machines." *Quantum Information & Computation*, 2025, doi: 10.2478/qic-2025-0002, arXiv: 2412.02662.

GS25 M. Utkan Gezer, A. C. Cem Say. "P has polynomial-time finite-state verifiers." *Discrete Mathematics & Theoretical Computer Science*, 2025, url: dmtcs.episciences.org/16655, arXiv: 2306.09542.

GDES23 M. Utkan Gezer, Özdeniz Dolu, Nevzat Ersoy, A. C. Cem Say. "Real-time, constant-space, constant-randomness verifiers." *Theoretical Computer Science*, 2023, doi: 10.1016/j.tcs.2023.114155, arXiv: 2206.00968.

GS22 M. Utkan Gezer, A. C. Cem Say. "Constant-space, constant-randomness verifiers with arbitrarily small error." *Information and Computation*, 2022, doi: 10.1016/j.ic.2021.104744, arXiv: 2006.12330.

Conference Papers and Presentations

- M. Utkan Gezer, A. C. Cem Say. "Finite State Verifiers with Both Private and Public Coins." *Italian Conference on Theoretical Computer Science (ICTCS 2023)*, url: ceur-ws.org/Vol-3587/1736.pdf, arXiv: 2306.09542v2.
  Presented: Palermo, Italy (In person), Sep 15, 2023, slides: utkangezer.com/files/slides/GS23.pdf
  Extended as: Journal article GS25 (independently)
- Özdeniz Dolu, Nevzat Ersoy, M. Utkan Gezer, A. C. Cem Say. "Real-Time, Constant-Space, Constant-Randomness Verifiers." *International Conference on Implementation and Application of Automata (CIAA 2022)*, doi: 10.1007/978-3-031-07469-1_17, arXiv: 2206.00968v1.
  Presented: Rouen, France (In person), Jun 30, 2022, slides: utkangezer.com/files/slides/DEGS22.pdf
  Extended as: Journal article GDES23 (selected for the special issue)
- M. Utkan Gezer. "Windable Heads and Recognizing NL with Constant Randomness." *Language and Automata Theory and Applications (LATA 2020)*, doi: 10.1007/978-3-030-40608-0_12, arXiv: 1912.01382.
  Presented: Milan, Italy (Online), Sep 20, 2021, slides: utkangezer.com/files/slides/G20.pdf
  Extended as: Journal article GS22 (selected for the special issue)

Preprints

- M. Utkan Gezer. "Constant-Coin Complete-Information Debates for P with Arbitrarily Small Strong Error." 2026, arXiv: 2609.24272.

Teaching

- **Teaching Assistant** (2019–2026), Computer Engineering, Boğaziçi University: CMPE 150 Introduction to Computing (Fall 2022; Fall 2024; Fall 2025; Spring 2026); CMPE 400 Engineering Internship (Spring 2026); CMPE 220 Discrete Computational Structures (Fall 2024); CMPE 350 Formal Languages and Automata Theory (Spring 2020; Spring 2021; Spring 2022; Spring 2024); CMPE 240 Digital Systems (Spring 2023); CMPE 352 Fundamentals of Software Engineering (Spring 2023); CMPE 443 Principles of Embedded Systems Design (Fall 2023); CMPE 451 Project Development in Software Engineering (Fall 2023); CMPE 344 Computer Organization (Fall 2020; Fall 2021); CMPE 250 Data Structures & Algorithms (Fall 2019); CMPE 300 Analysis of Algorithms (Fall 2019).
- **Lecturer** (2019), Computer Engineering, Boğaziçi University: CMPE 150 Introduction to Computing (Summer 2019), Co-instructed together with Cihat Baktır; ENG 101 Introduction to Computers (Spring 2019).
- **Volunteer Teaching Assistant** (2018), Computer Engineering, Boğaziçi University: CMPE 350 Formal Languages and Automata Theory (Fall 2018).
- **Student Teaching Assistant** (2014–2017), Computer Engineering, Boğaziçi University: CMPE 150 Introduction to Computing (Fall 2014; Fall 2016; Fall 2017); CMPE 260 Principles of Programming Languages (Spring 2017); CMPE 160 Introduction to Object Oriented Programming (Spring 2016); CMPE 220 Discrete Computational Structures (Fall 2015).

Service and Governance

- **Graduate student representative service**, Boğaziçi University (Dec 2021–Dec 2023): elected Graduate Student Representative for Computer Engineering; Vice Chair of Student Representatives of Graduate Studies in Science and Engineering; Member of Student Representatives' Coordination Council.

Languages

- English, Advanced/C2. TOEFL: 113/120 (2019), PTE-A: 86/90 (2018).
- German, Intermediate. Language of education in high school.
- Japanese, Basic. JLPT: N4 (2024).