

Uğur Yağmur Yavuz

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Education

- 2022– **Doctor of Philosophy**, *Boston University*, Boston, MA.
Computer Science. *Advisors: Marco Gaboardi and Alley Stoughton.*
- 2021–2022 **Master of Science**, *Dartmouth College*, Hanover, NH.
Computer Science. *Advisor: Prasad Jayanti.*
- 2017–2021 **Bachelor of Arts**, *Dartmouth College*, Hanover, NH, *GPA: 3.97/4.00.*
Computer Science and Mathematics. Graduated summa cum laude.

Experience

- 06/2022 – **Research Intern**, *Microsoft*, Redmond, WA
08/2022 As an intern for the Infer# project, I created a data mining tool in Python that gathers C# bug patch information from open-source GitHub projects, which enabled future work on a novel bug patch generation pipeline. I also worked on extending the capabilities of the Infer static code analysis tool in OCaml.
Skills: Python · OCaml · Static Analysis
- 06/2020 – **Research Intern**, *ISI, University of Southern California*, Marina del Rey, CA
08/2020 Worked on the improvement of legal testimonial translations from, and the creation of text corpora for low-resource Mesoamerican languages with Prof. Jon May and his team, using deep learning libraries.
Skills: Python · Data Scraping · Deep Learning · NLP · OCR
- 07/2019 – **Data Science Intern**, *Tani Marketing & Communication Services*, Istanbul, Turkey
08/2019 Worked on the optimization of customer discount assignments to maximize expected net profit for a major Turkish petroleum company, using optimizers like CPLEX and OR-Tools.
Skills: Python · SQL · Machine Learning · Optimization

Publications

- [1] Prasad Jayanti, Siddhartha Jayanti, **Uğur Y. Yavuz**, and Lizzie Hernández Videá. A universal technique for machine-certified proofs of linearizable algorithms, February 2023. arXiv:2302.00737.
- [2] **Uğur Y. Yavuz**. A machine-verified proof of linearizability for a queue algorithm. Master's thesis, Dartmouth College, 2022.

Skills and interests

- Languages** Turkish (native), English (C2), French (C1), Italian (A2)
- Technical skills** Python, OCaml, SQL, \LaTeX , TLA⁺/TLAPS, EasyCrypt.
- Interests** *Research:* Concurrent algorithms, formal verification, complexity theory and logic.
Editing Turkish & English Wikipedias, language learning, trivia, films and film history.