

ALPER ALIMOĞLU, PH.D.

Blockchain & Distributed Systems Researcher | Software Engineer

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SUMMARY

Ph.D. in Computer Engineering with over 12 years of experience in software development, blockchain systems, and distributed computing, including 1 year of industry experience as a researcher and software engineer.

SKILLS

Python Solidity Bash Ethereum Smart Contracts GNU/Linux Cloud Computing Blockchain
Docker Distributed Computing Flask

EXPERIENCE

Python Developer @Huawei Mar 2025-Aug 2025 Istanbul, Turkey

Part-time Lecturer @Boğaziçi University Feb 2025-Jun 2025 Istanbul, Turkey

Taught *Functional Programming and Verification* to senior undergraduate students.

Middleware Administrator @Anadolu Hayat Emeklilik Aug 2024-Nov 2024 Istanbul, Turkey

Cloud Engineer @ICRON A.Ş. Mar 2024-Apr 2024 Istanbul, Turkey

Research Project Assistant @Research Foundation for SUNY Aug 2012-Jul 2015 NY, USA

Smart Load Balancer: Applied Echo State Network ML models for workload prediction in data centers.

b-ext4 File System: Hybrid SSD/HDD design to optimize performance and reduce energy consumption.

Internships @Cisco, Ericsson, ITU Robotics Lab 2009-2010 Istanbul, Turkey

Cisco University Prize-winning research intern. RoboCup 3D Simulation Team (ITU AI & Robotics Lab).

EDUCATION

Ph.D. Computer Engineering

Boğaziçi University

📅 2016-2024

📍 GPA 3.64/4.0

Thesis: **EBlocBroker: Blockchain-based Computational Broker for e-Science** Advisor: Prof. Can Ozturan

M.Sc. Computer Science

Binghamton University - SUNY

📅 2012-2015

📍 Valedictorian, GPA 3.77/4.0

Thesis: **Short-Term Workload Prediction with Reservoir Computing** Advisor: Prof. Kanad Ghose

B.Sc. Information Systems Engineering (Dual Diploma Program)

Binghamton University - SUNY & Istanbul Technical University

📅 2008-2012

📍 Summa Cum Laude, GPA 3.89/4.0 (SUNY), Overall 3.62/4.0

PUBLICATIONS

Journal Articles

- Alimoglu, A., Özturan, C. "**An Autonomous Blockchain-Based Workflow Execution Broker for e-Science**", *Cluster Computing*, Springer (SCI-E Q1), May 2024. DOI:10.1007/s10586-024-04534-z
- Alimoglu, A., Özturan, C. "**An Autonomous Blockchain-Based Computational Broker for e-Science**", *Concurrency and Computation: Practice and Experience*, Wiley (SCI-E Q2), Mar 2024. DOI:10.1002/cpe.8087

Conference Papers

- Alimoglu, A., Erdayandi, K., Mustafa, M. A., Cali, Ü. "**EDGChain-E: A Decentralized Git-Based Framework for Versioning Encrypted Energy Data**", arXiv preprint, Jun 2025 (accepted - in press). arXiv:2507.01615
- Alimoglu, A., Özturan, C. "**Design of a Smart Contract Based Autonomous Organization for Sustainable Software**", *IEEE 13th International Conference on e-Science*, Oct 2017. IEEE Xplore Link
- Shahriar Asta, Tuna Sonmez, Onuralp Ulusoy, Alper Alimoglu, Mustafa Ersen, Ozdemir Sozmen, Sanem Sariel-Talay. "**BeeStanbul Team Description Paper**", *RoboCup Symposium Workshop*, Istanbul, Jul 2011. PDF Link

Preprints & Under Review

- Alimoglu, A., Özturan, C. "**Blockchain Based Autonomous Organization for Sustainable Software and Execution History**", Submitted to *Blockchain: Research and Applications*, Dec 2024.

HONORS & AWARDS



Valedictorian

Graduate commencement speaker, Binghamton University, 2014 , Speech: "Protect Our Dreams"



Summa Cum Laude

Top of Class, B.Sc. in Information Systems Engineering, 2012



Cisco University Prize

Winner, 2010



Dean's List

Multiple honors at Binghamton University - SUNY & ITU



Academic Achievement Award

Binghamton University - SUNY, GPA 3.98/4.0, 2012