

# ALPER ALIMOĞLU, PH.D.

Blockchain & Distributed Systems Researcher | Software Engineer

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## SUMMARY

Researcher and software engineer with 12+ years of experience in software development, blockchain systems, and distributed computing. Ph.D. in Computer Engineering (Boğaziçi University). Strong publication record (SCI Q1/Q2). Experienced in both academia (lecturer) and industry. Skilled in Python, Solidity, cloud engineering, and smart contracts.

## SKILLS

- Python
- Solidity
- C
- Bash
- Ethereum
- Smart Contracts
- GNU/Linux
- Cloud Systems
- Distributed Computing
- Blockchain
- Docker

## EXPERIENCE

Senior 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*.

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

Binghamton University - 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. in 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. in Computer Science

Binghamton University - SUNY

📅 2012 – 2014

📍 Valedictorian, GPA 3.77/4.0

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

B.Sc. in 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