ALPER ALIMOĞLU, PH.D.

Blockchain & Distributed Systems Researcher | Software Engineer

@ mailto:alper.alimoglu@gmail.com   ⚬ https://github.com/avatar-lavventura   📍 Istanbul, Turkey

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

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M.Sc. in Computer Science
Binghamton University (SUNY)

📅 2012 – 2014   📍 Valedictorian, GPA 3.77

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

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B.Sc. in Information Systems
SUNY Binghamton & Istanbul Technical University

📅 2008 – 2012   📍 Summa Cum Laude, GPA 3.89

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., 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., Erdayandi, K., Mustafa, M. A., Cali, Ü. **"EDGChain-E: A Decentralized Git-Based Framework for Versioning Encrypted Energy Data"**, arXiv preprint, Jun 2025. arXiv:2507.01615
- 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, 2012

🏆 **Cisco University Prize**
Winner, 2010

⭐ **Dean's List**
Multiple honors at ITU & SUNY

⭐ **Academic Achievement Award**
SUNY Binghamton, GPA 3.98, 2012