Eray Acikgoz

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Date of Birth: 05.12.1998
London, UK

EDUCATION

Norwegian University of Science and Technology (NTNU) — Trondheim, Norway
Department of Computer Science, Master's Degree — *June 2020 - Aug 2021*
Supervisor: *Prof. Jingyue Li,* **Projects:** *PaasforChain* **Courses:** *Operating Systems, Software Security & Data Privacy, Cryptography, Blockchain Technologies and Cryptocurrencies* **Research:** *High-Performance Async P2P Protocols*

Sakarya University — İstanbul, Turkey
Bachelor of Science - Systems Engineering and OR; GPA: 3.15 — *July 2016 - June 2020*
Bachelor's Thesis: *Simulation and analysis of P2P architectures in microgrids*

SKILLS SUMMARY

- **Languages**: Turkish (Native), English (Fluent)
- **Blockchain**: EVM Chains (Ethereum, BSC, Polygon, L2s), Solana
- **Programming Languages**: Go, Rust, SQL, Solidity, Python (NumPy, Pandas, SciPy, Matplotlib), MATLAB
- **Software & Tools**: MS Office, Git, Docker, LaTeX, SAP, Tableau, Notion, OverSim, Excelidraw

EXPERIENCE

Research Engineer — June 2023 - May 2024
Semiotic Labs / The Graph — *California, US*
- Designed and implemented verified blockchain data pipeline PoC for EVM chains data extraction and streaming.
- Architecht and built Era file service to serve historical data to execution layer clients like Nethermind.
- Developed VFH (Verifiable Firehose) solutions to ensure the integrity of extracted blockchain data and explored zk-compute technologies like DSLs, zkVMs, and co-processors for Substreams computation verification.
- Contributed to The Graph's evolution in offering decentralized data solutions, including JSON-RPC and SQL, by developing bespoke verifiable solutions tailored to specific security needs.

Researcher Collaborator — Nov 2023 - Feb 2023
Primev — *Delaware, US*
- Pioneered solutions in preconfirmations, inclusion lists, hooks, CR and other MEV primitives for mev-commit.
- Worked closely with founder to set strategic research priorities and engineering initiatives.

Protocol Fellow — Oct 2022 - Feb 2023
Ethereum Foundation — *Berlin, Germany*
- Researched and focused on PBS, MEV, Cryptoeconomics, Encrypted Mempools, Based Rollups and Mechanism Design under the mentorship of Barnabe Monnot and Alex Stokes in the Robust Incentives Group.
- Completed the cadCAD Masterclass for comprehending Ethereum Validator Economics and analysed the EIP-1559.

R&D Project Engineer — Aug 2021 - Oct 2022
Faradai — *London, UK*
- Granted by the EU Horizon 2020 program for developing an on-chain carbon scoring, tracking, and lending protocol, RWAs in the scope of digitalization and decarbonization of the energy sector, which utilized IoT and energy intelligence.
- Contributed to the development of ESG frameworks and strategies using our data intelligence platform.

SELECTED PROJECTS

- **EBRD & University of Cambridge - Cyber Resilience Project**: The project lays out current cyber-resilience and blockchain security best practices in critical infrastructures such as food, finance, energy, water, transport, health, emergency services, and telecommunications sectors. I am the team lead for Finance.

- **NTNU PaasforChain**: Platform as Service Technologies for High performance Blockchain-based Supply Chain Management Systems. Architecture design, cryptoeconomic security and privacy, cryptography and consensus mechanism.

PUBLICATIONS AND SELECTED WRITINGS

- Using The Graph to Preserve Historical Data and Enable EIP-4444 — *Nov 2023*
  Eray Acikgoz, Seve Sisneros
- Understanding the Technical Aspects of Aztec 3 and Noir — *May 2023*
- Designing the Business Ecosystem of a Decentralised Energy Datahub — *Jan 2022*
  Sinan Küfeoğlu, **Eray Acikgoz,** Jan Priesmann, Aaron Praktiknjo
- Aave V3 Report; Sui vs Aptos Report for Sei — *Sep 2022*
- Concerns on censorship from the perspective of MEV — *Oct 2022*
  Eray Acikgoz, EF Protocol Fellowship

HONORS, AWARDS & GRANTS

- Axiom ZK Intensive Cohort 2
- Fenbushi Capital Research Fellow
- Blockcircus, Turkey's first Blockchain Hackathon Winner & Special Award Winner (HartHouse.co) - 2018