Eray Acikgoz

Website Github Linkedin Twitter

Email: erayackgoz@hotmail.com Mobile: +44-7865-365761 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

Sakarya, 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

Senior Research Engineer

Nov 2023 - Feb 2023

Primev

Output

Delaware, US

Developed the mev-commit to facilitate exchange of execution bids and credible commitments between MEV actors.

- 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 as research engineer/architect.

Research Engineer

June 2023 - present

Semiotic Labs / The Graph

California, US

- o Designed and implemented verified blockchain data pipeline PoC for EVM chains data extraction and streaming.
- o 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.

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.
- o 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