# **Itamar Reif**

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# ACADEMIC EXPERIENCE

#### New York University

New York, NY

B.A.; Joint Major, Computer Science and Economics, Minor, Mathematics

Fall 2017 — Fall 2021

- Cumulative GPA: 3.47/4.0 | Dean's List 2017
- Relevant Coursework: Algorithmic Game Theory, Abstract Interpretation, Programming Languages (Honors), Markets with Friction, Dynamical Systems & Chaos,
- Teaching Assistant, Computer Systems Organization, Fall 2019

Tinbergen Institute August 2021

Summer School in Behavioral Macroeconomics & Complexity

## Math+Econ+Code @ NYU

June 2022

Workshop on Equilibrium Transport & Matching Models in Economics

## TLDR (The Latest In Defi Research)

Fellow

October 2023 — May 2024

- Benchmarking & Economic Analysis of ZK Rollup Costs. Published @ AFT'24, Presented @ TLDR'24
- Work funded by grants from the Uniswap Foundation's TLDR initiative and the Ethereum Foundation

## WORK EXPERIENCE

#### Software Engineer & Researcher

 ${\rm May}\ 2023 - {\rm April}\ 2025$ 

Astria

- Designed block auction protocol for rollups and built microservice to operate the auctions & drive simulation in Rust.
- Designed bridging protocol between rollups and our shared sequencer, and built the withdrawal processing pipeline in Rust.
- Designed and built gas station protocol to allow users to pay our sequencer network's fees using rollup transaction fees.
- Led research into leveraging sequencing rules for rollups, collaborating with Flashbots, Aztec, and others.

Software Engineer October 2022 — May 2023

Duality Labs

- Designed & implemented core components for Uniswap V3-style decentralized exchange in Golang using Cosmos SDK.
- Lead an internal research effort to migrate our exchange product to an optimistic rollup using a data availability provider.

#### Research Engineer

February 2022 — October 2022

Block Science

- Conducted simulation-driven analysis for leverage parameters on Sifchain, a margin-enabled decentralized exchange.
- $\bullet \ \ \text{Mechanism design} \ \& \ \text{simulation-driven analysis for curation markets on Streamr, a decentralized data provider network.}$
- Maintained Python tools for developing digital twins of blockchain-based markets.

## Junior Software Developer

January 2020 — January 2022

Recherché Inc.

- Developed smart contracts for Compound V2-style lending platform and a domain name system on the Tezos blockchain.
- Developed smart contracts based on Tezos' TZIP-7 (ERC20 analog) and TZIP-12 (ERC-1155 analog) token standards & supporting Typescript tooling.
- Added support for BIP-32 hardened derivation and multi-signature wallet in our Typescript library for Tezos.
- Built and maintained Typescript-based Earley parser to support dynamic calls and storage reads for Tezos smart contracts.

### ETC.

## Veblen Group (veblen.group)

April 2025 — Present

- <u>Kuma</u>, a cross-chain arbitrage bot. Grant work for Propellor Heads (<u>TAP-6</u>)
- ooouuuooo, NFT based on the gas consumed by minting, with on-chain SVG generation.

Volunteer, Movement for Freedom of Information (meida.org.il/)

September 2016 — August 2017

- Worked with journalists & non-profits to research legislation and government data for abuse of power &
- Uncovered municipal abuse of power that violated hundreds of citizens' privacy at a cost of ~\$10m to taxpayers.