

AVIV YAISH

RESEARCH INTERESTS

Blockchains, Economics, Incentives, Security, Decentralized Finance, Mechanism Design

PERSONAL DATA

Site avivyaish.com

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EDUCATION

PhD	The Hebrew University, Computer Science, 99.07 GPA	2019 - Present
MSc	The Hebrew University, Computer Science, 97.55 GPA	2016 - 2018
BSc	The Hebrew University, Computer Science (+ minor in Math)	2013 - 2016

HONORS AND AWARDS

The Authority for Research Students' travel grant (Hebrew University)	2022
Award for excellence in the teaching evaluation survey (Hebrew University)	2021
Ethereum bug bounty prize (Ethereum Foundation)	2021
Ranked 9th out of 111 teaching staff (Hebrew University)	2020
Zcon1 travel grant (Zcash Foundation)	2019
Ze'ev Jabotinsky 4-year fellowship for doctoral students (Hebrew University)	2018
Rector's prize (Hebrew University), for ranking first in class	2018
Dean's prize (Hebrew University), for outstanding academic achievements	2018
First place at the Hebrew University's Machine Learning hackathon	2016
The Amirim Science excellence scholarship (Hebrew University)	2013
Excellence award (IDF), for the development of a new mission critical system	2011
Department excellence award (IDF), for the advancement of my department	2010

PAPERS

Uncle Maker: (Time)Stamping Out The Competition In Ethereum	2022
<i>Aviv Yaish, Gilad Stern, Aviv Zohar</i> Accepted to <i>The Crypto Economics Security Conference (CESC '22)</i> .	
Blockchain Stretching & Squeezing: Manipulating Time For Your Best Interest	2022
<i>Aviv Yaish, Saar Tochner, Aviv Zohar</i> In <i>Proceedings of the 23rd ACM Conference on Economics and Computation (EC '22)</i> .	
Correct Cryptocurrency ASIC Pricing: Are Miners Overpaying?	2020
<i>Aviv Yaish, Aviv Zohar</i> Accepted to <i>The Crypto Economics Security Conference (CESC '22)</i> .	

EXPERIENCE

Head Instructor , The Hebrew University of Jerusalem	Oct '17 - Present
Created and taught "Systems Introduction" (67100) and taught "From NAND to Tetris" (67925/6), both are undergraduate Computer Science courses averaging 850 and 600 students per semester, respectively. Managed a team of 8 TAs.	

TA and Co-creator, The Hebrew University of Jerusalem Mar '20 - Sep '20
Co-created and served as a teaching assistant for "Introduction to Cryptocurrencies" (67513), a graduate-level Computer Science course covering the theory and practice of cryptocurrencies and decentralized finance. The course culminated with the course's 50 students producing innovative blockchain projects, under my guidance.

Teaching Assistant, The Hebrew University of Jerusalem Mar '16 - Sep '17
Served as a teaching assistant for multiple courses, such as "From NAND to Tetris" (67925), "Introduction to Object Oriented Programming" (67125), "Programming Workshop in C & C++" (67318/9).

Satellite Groundsystems Operator and Developer, IDF Mar '09 - Mar '13
Founder and head of my unit's coding team. Developed mission-critical groundsystems.

TALKS

The Federmann Cyber Security Center's Retreat 2022

Uncle Maker: (Time)Stamping Out The Competition In Ethereum

Chaincode Labs' Research Seminar 2022

Blockchain Stretching & Squeezing: Manipulating Time For Your Best Interest

The 23rd ACM Conference on Economics and Computation 2022

Blockchain Stretching & Squeezing: Manipulating Time For Your Best Interest

First Israeli Blockchain Research Day 2021

Correct Cryptocurrency ASIC Pricing: Are Miners Overpaying?

The Hebrew University's Cryptocurrencies Seminar 2019

Correct Cryptocurrency ASIC Pricing: Are Miners Overpaying?

SUPERVISION

Nimrod Rak, The Hebrew University Aug '22 - Present

Title: Simulating cryptocurrency networks using real clients.

Eytan Tsytkin, The Hebrew University Apr '22 - Aug '22

Title: Application of Big Data methods to cryptocurrencies.

Imri Paran, The Hebrew University Oct '21 - Present

Title: An exploration of Bitcoin's attack surface.

SERVICE

Conference Reviewer, Symposium on Discrete Algorithms (SODA) 2022

Conference Reviewer, Advances in Financial Technologies (AFT) 2020

OTHER

Volunteer, Melabev Nov '20 - Jan '22

Volunteered with elderly people with dementia.

Accompanied a group of people suffering from early-onset dementia to the Israeli Museum on a weekly basis, and participated in the "Keshet" telephone program by calling another group of elderly people throughout the week. Additionally, translated documents from Hebrew to English.