Moshe Shenfeld

Curriculum Vitae

Education

2021-2026: PhD student in Computer Science at the Hebrew University of Jerusalem,

advised by Katrina Ligett. Dissertation Title - Privacy, Stability, and

Generalization: Separating the Wheat From the Chaff

2016-2019: MSc (Magna cum Laude) in Computer Science at the Hebrew University of

Jerusalem, advised by Katrina Ligett (Cumma sum laude)

2009-2013: BSc (Magna cum Laude) in Physics, Mathematics and Computer Sciences,

"Amirim" Excellence Program at the Hebrew University of Jerusalem (Cumma

sum laude)

Professional Experience and Appointments

Employment

2014-2017: Algorithms engineer, Mobileye

2017-2022: Algorithms team manager, Mobileye

2022- : Technical expert (student position), Mobileye

Teaching

2022- : Learning seminar (coordinating the speakers, coaching the students in their

presentations)

2023- : Applied data privacy (developed and taught the course, now updating to be

available online)

Military Service

2005-2008: Fighter and commander in in a Ground to Air Missiles Battery (Hawk)

Honors and Awards:

Recipient of the Apple Scholars in AI/ML PhD fellowship.

Publications (applicant in bold):

a. Published

- **Shenfeld, M.**, & Ligett, K. (2023). Generalization in the face of adaptivity: A Bayesian perspective. Advances in Neural Information Processing Systems, 36.
- Jung, C., Ligett, K., Neel, S., Roth, A., Sharifi-Malvajerdi, S., & **Shenfeld, M.** (2020). A New Analysis of Differential Privacy's Generalization Guarantees. In 11th Innovations in Theoretical Computer Science Conference (ITCS 2020).
- **Shenfeld, M.**, & Ligett, K. (2019). A necessary and sufficient stability notion for adaptive generalization. Advances in Neural Information Processing Systems, 32.

b. Accepted for publication

c. Submitted

- Feldman, V., & **Shenfeld, M.** (2025). Privacy amplification by random allocation. arXiv preprint arXiv:2502.08202. (Submitted to NeurIPS 2025)
- Keinan, A., **Shenfeld, M.**, & Ligett, K. (2025). How Well Can Differential Privacy Be Audited in One Run?. arXiv preprint arXiv:2503.07199. (Submitted to NeurIPS 2025)
- Lev, O., Srinivasan, V., **Shenfeld, M.**, Ligett, K., Sekhari, A., & Wilson, A. C. (2025). The Gaussian Mixing Mechanism: Renyi Differential Privacy via Gaussian Sketches. arXiv preprint arXiv:2505.24603. (Submitted to NeurIPS 2025)

Other Noteworthy Activities and Skills:

I am the founder and previous Chairman of <u>Out for Change</u>, a NGO supporting young people leaving the Jewish Ultra-Orthodox community, to successfully acclimate to mainstream society, by raising awareness, changing policy, developing programs and providing direct support.

My current involvement is with the research department of the organization, under which I've published the following academic article: Shenfeld, M. (2020). The Right to Education: Israeli OTD People and Their Struggle for a Fair Chance. Off the Derech, 217-248.

In my position as an algorithm engineer, I specialized in Statistical Estimation, Image Processing, Projective Geometry and Computational Geometry. This research has led to several approved patent applications. Later I was a hands-on manager of up to 25 people across 5 technologies, including algorithmic developments, system design, and implementation. Recently I focused on combining deep learning techniques with existing classical models in this regime.