CONTACT
Cell: (+972) 058-5599200
Email: nivhaa@gmail.com
Homepage: https://nivha.github.io

RESEARCH INTERESTS
Machine and Deep Learning, Memorization in Neural Networks, Generative Models, Computer Vision

EDUCATION

Weizmann Institute of Science, Rehovot, Israel **2018 - 2023**
Ph.D. Student, Computer Science and Applied Math
Advisor: Prof. Michal Irani

Weizmann Institute of Science, Rehovot, Israel **2015 - 2018**
M.Sc., Computer Science and Applied Math
Advisor: Prof. Boaz Katz (Department of Astrophysics)

Technion, Haifa, Israel **2011 - 2015**
B.Sc., Computer Science. B.Sc., Physics
Lapidim excellence program[†]

EMPLOYMENT HISTORY

Lecturer (Freelance) **2019 - 2023**
I collaborate with education providers (DART, Y-Data, Primrose, and SagivTech) delivering courses on diverse subjects such as Machine and Deep Learning, Generative AI, Image Processing, Python, MATLAB etc.

Hebrew University, Research Assistant **2015 - 2015**
Developed machine learning tools for analysis of political discourse

Tonara, Backend Developer **2011 - 2014**
Developed data/image processing tools for musical applications

IDF, Team Leader **2007 - 2010**
Managed analysts team and coordinated between multiple organizations

TEACHING @ WEIZMANN

Advanced Topics in Computer Vision and Deep Learning
[Spring 2020, Spring, 2021, Spring 2022, Spring 2023]

Deep Learning for Computer Vision
[Winter 2021, Winter 2022]

Deep Neural Networks - a Hands-On Challenge [Spring 2017]

[†]Technion CS department excellence program for first-rate computer science students with the potential for leadership or entrepreneurial pursuits (5 accepted students each year).

Invited Talks

05.07.23 Tel Aviv University ML/CV Seminar, Invited by Prof. Shai Avidan
22.05.23 Talk at Trigo Vision, Invited by Hadar Gorodissky
24.04.23 Talk at General Motors, Invited by Dr. Shaul Oron
16.01.23 Israel Computer Vision Day, Hosted by Prof. Shai Avidan
20.12.22 Microsoft Data Science Bond (DSBond) [Recording]
06.12.22 Talk at Google NYC, Invited by Dr. Daniel Glasner
13.11.22 Hebrew University of Jerusalem (HUJI), Invited by Prof. Shmuel Peleg
31.08.22 Machine Learning Seminar at Healthy.io. Invited by Sivan Biham
27.03.22 Hebrew University of Jerusalem (HUJI), Invited by Prof. Shmuel Peleg
06.05.21 Intro to Adversarial Examples at Weizmann DL4CV course WIS
17.12.17 Israel Physical Society Conference 2017. Hosted by Prof. Hagai Perets

Publications

[1] "SinFusion: Training Diffusion Models on a Single Image or Video",
Y.Nikankin*, N.Haim*, M.Irani. **ICML 2023**

[2] "Reconstructing Training Data from Multiclass Neural Networks",
G.Buzaglo*, N.Haim*, G.Yehudai, G.Vardi, M.Irani. **ICLR 2023 TrustML Workshop**

[2] "Reconstructing Training Data from Trained Neural Networks",
N.Haim*, G.Vardi*, G.Yehudai*, O.Shamir, M.Irani. **NeurIPS 2022; Oral**

[3] "Diverse Generation from a Single Video Made Possible",
N.Haim*, B.Finestein*, N.Granot, A.Shocher, S.Bagon, T.Dekel, M.Irani.
ECCV 2022

[4] "From Discrete to Continuous Convolution Layers",
A.Shocher*, B.Finestein*, N.Haim*, M.Irani. Technical Report 2020

[5] "Implicit Geometric Regularization for Learning Shapes",
A.Gropp, L.Yariv, N.Haim, M.Atzmon, Y.Lipman. **ICML 2020**

[6] "Controlling Neural Level Sets",
M.Atzmon, N.Haim, L.Yariv, O.Israelov, H.Maron, Y.Lipman. **NeurIPS 2019**

[7] "Surface Networks via General Covers",
N.Haim*, N.Segol*, H.Ben-Hamu, H.Maron, Y.Lipman. **ICCV 2019**

[8] "Extreme close approaches in hierarchical triple systems with comparable masses",
N.Haim, Boaz Katz.
Monthly Notices of the Royal Astronomical Society 2018

Honors and Awards

Hurvitz Scholarship, 2022
Technion - graduated Cum Laude, 2015
Technion AI Course Multi-Agent Competition 1^{st} Place, 2013
"Mekor Haim", IDF Intelligence Technological Unit award
for outstanding professional excellence, 2010

*Denotes equal first author.