CONTACT Cell: (+972) 058-5599200

Email: nivhaa@gmail.com

Homepage: https://nivha.github.io

RESEARCH INTERESTS

Machine and Deep Learning, Computer Vision, Generative Models, Physics for ML

EDUCATION

Weizmann Institute of Science, Rehovot, Israel 04.2018 - 04.2023<sup>†</sup>

Ph.D. Student, Computer Science and Applied Math

Advisor: Prof. Michal Irani

Weizmann Institute of Science, Rehovot, Israel 10.2015 - 01.2018

M.Sc., Computer Science and Applied Math

Advisor: Prof. Boaz Katz (Department of Astrophysics)

Technion, Haifa, Israel 10.2011 - 10.2015

B.Sc., Computer Science. B.Sc., Physics

Lapidim excellence program<sup>‡</sup>

**PUBLICATIONS** 

[1] "SinFusion: Training Diffusion Models on a Single Image or Video", Y.Nikankin\*, N.Haim\*, M.Irani. Under review 2022

[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

<sup>†</sup>Expected.

<sup>&</sup>lt;sup>‡</sup>Technion CS department excellence program for first-rate computer science students with the potential for leadership or entrepreneurial pursuits (5 accepted students each year).

<sup>\*</sup>Denotes equal first author.

HONORS AND Hurvitz Scholarship, 2022
AWARDS Technion: graduated Cum

Technion: graduated Cum Laude, 2015

DAAD Scholarship for intensive German course 2015

Technion AI Course Multi-Agent Competition 1<sup>st</sup> Place, 2013

IDF: "Mekor Haim" award for outstanding professional excellence, 2010

TEACHING Deep Learning for Computer Vision Winter 2022-2023

(WIS) Advanced Topics in Computer Vision and Deep Learning Spring 2021-2022

Deep Learning for Computer Vision Winter 2021-2022

Advanced Topics in Computer Vision and Deep Learning Spring 2020-2021

Deep Neural Networks - a Hands-On Challenge Spring 2016-2017

INVITED TALKS 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

EMPLOYMENT Primrose, Lecturer 07.2021 - on

HISTORY Machine and Deep Learning Course

SagivTech, Lecturer 09.2019 - 10.2020

Introduction courses on Deep Learning, Image Processing and Matlab

Hebrew University, Research Assistant 03.2015 - 08.2015

Developed machine learning tools for analysis of political discourse

Tonara, Backend Developer 05.2011 - 03.2014

Developed data/image processing tools for musical applications

IDF, Team Leader 12.2007 - 03.2010

Managed analysts team and coordinated between multiple organizations