

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	<div> Weizmann Institute of Science, Rehovot, Israel 2018 - 2023 Ph.D., Computer Science and Applied Math Advisor: Prof. Michal Irani </div> <div> Weizmann Institute of Science, Rehovot, Israel 2015 - 2018 M.Sc., Computer Science and Applied Math Advisor: Prof. Boaz Katz (Department of Astrophysics) </div> <div> Technion, Haifa, Israel 2011 - 2015 B.Sc., Computer Science. B.Sc., Physics Lapidim excellence program[†] </div>
EMPLOYMENT HISTORY	<div> Lecturer (Freelance) 2019 - Present I collaborate with education providers (SagivTech, Primrose, and Y-DATA) delivering courses on diverse subjects such as machine and deep learning, generative AI, image processing, Python, MATLAB etc. </div> <div> Research Assistant, Hebrew University 2015 - 2015 Developed machine learning tools for analysis of political discourse </div> <div> Backend Developer, Tonara 2011 - 2014 Developed data/image processing tools for musical applications </div> <div> Team Leader, IDF 2007 - 2010 Managed analysts team and coordinated between multiple organizations </div>
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	<p>22.05.23 Talk at Trigo Vision, Invited by Hadar Gorodissky</p> <p>24.04.23 Talk at General Motors, Invited by Dr. Shaul Oron</p> <p>16.01.23 Israel Computer Vision Day, Hosted by Prof. Shai Avidan</p> <p>20.12.22 Microsoft Data Science Bond (DSBond) [Recording]</p> <p>06.12.22 Talk at Google NYC, Invited by Dr. Daniel Glasner</p> <p>13.11.22 Hebrew University of Jerusalem (HUJI), Invited by Prof. Shmuel Peleg</p> <p>31.08.22 Machine Learning Seminar at Healthy.io. Invited by Sivan Biham</p> <p>27.03.22 Hebrew University of Jerusalem (HUJI), Invited by Prof. Shmuel Peleg</p> <p>06.05.21 Intro to Adversarial Examples at Weizmann DL4CV course WIS</p> <p>17.12.17 Israel Physical Society Conference 2017. Hosted by Prof. Hagai Perets</p>
PUBLICATIONS	<p>[1] “SinFusion: Training Diffusion Models on a Single Image or Video”, Y.Nikankin*, N.Haim*, M.Irani. ICML 2023</p> <p>[2] “Reconstructing Training Data from Multiclass Neural Networks”, G.Buzaglo*, N.Haim*, G.Yehudai, G.Vardi, M.Irani. ICLR 2023 TrustML Workshop</p> <p>[3] “Reconstructing Training Data from Trained Neural Networks”, N.Haim*, G.Vardi*, G.Yehudai*, O.Shamir, M.Irani. NeurIPS 2022; Oral</p> <p>[4] “Diverse Generation from a Single Video Made Possible”, N.Haim*, B.Finestein*, N.Granot, A.Shocher, S.Bagon, T.Dekel, M.Irani. ECCV 2022</p> <p>[5] “From Discrete to Continuous Convolution Layers”, A.Shocher*, B.Finestein*, N.Haim*, M.Irani. Technical Report 2020</p> <p>[6] “Implicit Geometric Regularization for Learning Shapes”, A.Gropp, L.Yariv, N.Haim, M.Atzmon, Y.Lipman. ICML 2020</p> <p>[7] “Controlling Neural Level Sets”, M.Atzmon, N.Haim, L.Yariv, O.Israelov, H.Maron, Y.Lipman. NeurIPS 2019</p> <p>[8] “Surface Networks via General Covers”, N.Haim*, N.Segol*, H.Ben-Hamu, H.Maron, Y.Lipman. ICCV 2019</p> <p>[9] “Extreme close approaches in hierarchical triple systems with comparable masses”, N.Haim, Boaz Katz. Monthly Notices of the Royal Astronomical Society 2018</p>
HONORS AND AWARDS	<p>Hurvitz Scholarship, 2022</p> <p>Technion - graduated Cum Laude, 2015</p> <p>Technion AI Course Multi-Agent Competition 1st Place, 2013</p> <p>“Mekor Haim”, IDF Intelligence Technological Unit award for outstanding professional excellence, 2010</p>

*Denotes equal first author.