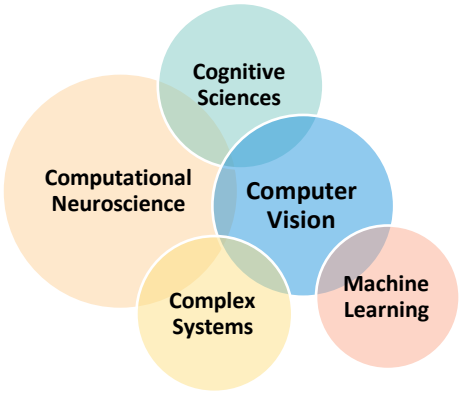

GUY GAZIV

Curriculum Vitae

ggaziv@gmail.com
guyga@mit.edu

webpage
ggaziv.github.io

AI researcher with strong academic and industry experience. Trained as a physicist, engineer, and a computer scientist, and having background also in Neuroscience & Biology, I am a multidisciplinary scientist focused on the interface between machine and human vision.

EDUCATION:

2016-2021 **Ph.D. Computer Science | Weizmann Institute of Science**
Thesis title: *"Decoding Visual Experience from Brain Activity"*
(Deep Learning | Computer Vision | Neuroscience)
Advisor: Prof. Michal Irani

2013-2016 **M.Sc. Physics | Weizmann Institute of Science**
Thesis title: *"Motion Motifs: Dyadic Modes of Body Movement in Scientific Conversations"*
Advisor: Prof. Uri Alon

2008-2012 **B.Sc. Electrical and Computer Engineering | Hebrew University of Jerusalem**
Electronic and Photonic device track
magna cum laude

2001-2004 **The Hebrew University Secondary School (Leyada)**

PROFESSIONAL APPOINTMENTS:

2022-present **Postdoctoral Researcher, Computer Vision & Brain | MIT**
Host: Prof. James DiCarlo

2021-2022 **Postdoctoral Fellow, Computer Science | Weizmann Institute of Science**
Host: Prof. Michal Irani

2018-2022 **AI Researcher & Consultant | Intelligence Corps (3060/ 8200)**
Prototyping computer vision systems using Deep Learning

2016-2018 **Algorithm Developer | FST Biometrics**
Implemented Deep Learning gait-based identification system. The system was designed for access control and retail markets

2012-2013 **Software Engineer | Mellanox Technologies**
Developed a monitoring and management product for Ethernet and Infiniband interconnect systems, used for purposes of HPC, academic research and finance

2010-2012 **Hardware Engineer | Intel**
Development of data centers Ethernet communication chips

2007-2008 **Chief Commander, Israel Defense Force | Intelligence Corps (8200)**

- Head of wireless operation training program (steady service, officer role)
- Team leader and mentor of 10 commanders and 80 trainees -- Hundreds of alumni
- Designed courses and lectures: Arabic, intelligence professions, and education

TEACHING & MENTORING

Aug 2023	**Deep Generative Models**, Brains Minds & Machines Summer Course, MA, USA
2019-present	**Teaching Assistant, Weizmann Institute of Science** Course: *Introduction to Computer Vision*
2010-2011, 2013-2016	**Academic Tutor, Hebrew University of Jerusalem** Courses: *Classical Mechanics, Electricity & Magnetism, Calculus*

HONORS AND AWARDS

2008-2010	Dean's list, Faculty of Science, Hebrew University of Jerusalem
2008	Faculty Prize, Hebrew University of Jerusalem
2005	Wireless operations excellent trainee award, Intelligence Corps

GRANTS AND FELLOWSHIPS

2021	**2021 Fulbright Postdoctoral Fellowship (declined)**
2021-present	**Weizmann Institute of Science Postdoctoral Fellowship**
2018	**Prime Minister's office international summer school fellowship. The fellowship funds participation in 15th IAPR/Eurasip International Summer School for Advanced Studies on Biometrics for Secure Authentication.**
2016-2021	**Weizmann Institute of Science PhD Fellowship**
2015	**European Physical Society Travel Grant**
2013-2016	**Weizmann Institute of Science MSc Fellowship**

PUBLICATIONS

Published Peer-Reviewed Papers:

***equal contribution**

[1] **Gaziv, G.***, Lee, M.*, & DiCarlo, J. (2023). Strong and Precise Modulation of Human Percepts via Robustified ANNs. *In Advances in Neural Information Processing Systems (NeurIPS)*

[2] **Gaziv, G**.*, Beliy, R.*, Granot, N.*, Hoogi, A., Strappini, F., Golan, T., & Irani, M. (2022). Self-Supervised Natural Image Reconstruction and Large-Scale Semantic Classification From Brain Activity. *NeuroImage*

[3] Beliy, R.*, **Gaziv, G**.*, Hoogi, A., Strappini, F., Golan, T., & Irani, M. (2019). From Voxels to Pixels and Back: Self-Supervision in Natural-Image Reconstruction From fMRI. *In Advances in Neural Information Processing Systems (NeurIPS)*

[4] Grossman, S.*, **Gaziv, G.***, Yeagle, E. M., Harel, M., Mégevand, P., Groppe, D. M., Khuvis, S., Herrero, J. L., Irani, M., Mehta, A. D., Malach R. (2019). Convergent Evolution of Face Spaces Across Human Face-Selective Neuronal Groups and Deep Convolutional Networks. *Nature Communications*

[5] **Gaziv, G.**, Noy, L., Liron, Y., & Alon, U. (2017). A Reduced-Dimensionality Approach to Uncovering Dyadic Modes of Body Motion in Conversations. *PLOS One*

Preprints:

[6] Kupershmidt, G., Beliy, R., **Gaziv, G**., & Irani, M. (2022). A Penny for Your (visual) Thoughts: Self-Supervised Reconstruction of Natural Movies from Brain Activity. *arXiv*

[7] **Gaziv, G**. & Irani, M. (2021). More Than Meets the Eye: Self-Supervised Depth Reconstruction From Brain Activity. *arXiv*

INVITED TALKS

Feb 2024	**Strong and Precise Modulation of Human Percepts via Robustified ANNs** Vision & AI seminar, Weizmann Institute, Israel
Feb 2024	**Robustified ANNs Reveal Wormholes Between Human Category Percepts** Pixel Club, Technion, Israel
Feb 2024	Vision Seminar, Tel-Aviv University, Israel
Feb 2024	Vision Seminar, The Hebrew University, Israel
Feb 2024	Creative Camera Reading Group, Google Tel-Aviv, Israel
Feb 2024	Computer Science Colloquium, Reichman University, Israel
Feb 2024	Gonda Brain Research Center, Bar Ilan University, Israel
Dec 2023	**Developing and validating models of the ventral visual stream via neural and behavioral modulation.** Simons Collaboration on the Global Brain, USA
Sep 2023	**Robustified ANNs Reveal Wormholes Between Human Category Percepts** Carney Institute for Brain Science, Brown University, USA
Jul 2023	**Deploying Model of Vision: From Mind Reading to Behavior Modulation** 🎥 Recording VisCAM, Google Cambridge, USA
	Mind Reading: Decoding Visual Experience from Brain Activity
Apr 2022	Brain & AI, Meta, Paris
Mar 2022	Rafael Computer Vision, Leshem Institute, Israel
Feb 2022	Sagol Neurobiology Dept, Haifa University, Israel
Dec 2021	AAAI Seminar, 8200, Israel 🎥 Recording
Nov 2021	Computer Science Colloquium, Tel-Aviv University, Israel
Nov 2021	Computer Science Colloquium, Reichman University, Israel
Nov 2021	Computer Science Colloquium, Ben Gurion, Israel
Oct 2021	Gonda Brain Research Center, Bar Ilan University, Israel 🎥 Recording
Oct 2021	**Self-Supervised Natural Image Reconstruction and Rich Semantic Classification From Brain Activity** Israeli Conference on Medical Informatics (ICMI)
Jan 2021	GIDRM 2020 workshop on Artificial Intelligence in NMR/MRI and Neuroscience
Jan 2020	**Self-Supervision in Natural-Image Reconstruction From fMRI** 🎥 Recording Israel Computer Vision Day 2019, Tel-Aviv University, Israel
Jan 2020	Pixel Club, Technion, Israel
Oct 2019	Vision Seminar, The Hebrew University, Israel

POSTER PRESENTATIONS

Dec 2023	**Strong and Precise Modulation of Human Percepts via Robustified ANNs**, NeurIPS, USA
Jan 2021	**Self-Supervised Natural Image Reconstruction and Rich Semantic Classification from Brain Activity,** SfN Global Connectome (virtual)
Oct 2020	IMVC (Israel Machine Vision Conference), Israel
Aug 2020	Brain Minds & Machines Summer Course, MIT, USA (virtual)
Dec 2019	**Self-supervision in Natural-Image Reconstruction from fMRI**, NeurIPS, Canada
Nov 2019	AI Week, Tel Aviv University, Israel
Jul 2019	The Algonauts Workshop, MIT, USA
Mar 2018	**In Motion Identification Based on Gait**, IMVC, Israel
Jun 2015	**Nonverbal communication in scientific conversations**, Granada Seminar on Computational and Statistical Physics, Spain

OTHER PROFESSIONAL ACTIVITIES

Aug 2023	TA in the Brains Minds & Machines (BMM) Summer Course, Woods Hole MA, USA
Aug 2020	Participated in the Brains Minds & Machines (BMM) Summer Course, MIT (virtual)
Jul 2019	Participated in the Algonauts 2019 Challenge and workshop, MIT, USA ▪ I was ranked 3 and 4 in fMRI and MEG challenge tracks ▪ Presented a poster on image reconstruction from fMRI at the workshop
Jun 2018	Participated in the 15th international Summer School for Advanced Studies on "Assuring Trustworthiness of Biometrics", Alegro, Italy

Reviewer: *Cosyne (2023)*

PROGRAMMING/CAD EXPERIENCE

Python, MATLAB, PyTorch, TF, Keras, Caffe, Java, Specman (e), bash, c#, .Net, Unity3D, Solidworks

HOBBIES AND INTERESTS

- Woodworking, Gardening
- Yoga teacher
- Piano, guitar, didgeridoo
- Design and fly radio-controlled airplane, helicopter & quadcopter models

LANGUAGES

Hebrew ★★★★★
English ★★★★★
Arabic ★★★★★