

Yael Vinker

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<https://yael-vinker.github.io/website>

Education

- **PhD student in Computer Science** (Computer Vision, Deep Learning) 2021 - Current
Tel Aviv University, Israel
 - Supervisors: Prof. Daniel Cohen-Or and Prof. Ariel Shamir
 - Research topics: generative visual communication in the era of vision-language models
- **M.Sc. in Computer Science** (Computer Vision, Deep Learning) 2019 - 2021
The Hebrew University of Jerusalem, Israel
 - Supervisor: Prof. Raanan Fattal
 - Thesis: “Unpaired Learning for High Dynamic Range Image Tone Mapping”
 - GPA: 95/100
- **B.Sc. in Computer Science and Visual Communication** 2016 - 2019
The Hebrew University of Jerusalem and Bezalel Academy of Art and Design, Israel
 - Included in the Dean's list for 2017
 - Honors: *magna cum laude*. GPA: 94/100

Publications

- Yarden Frenkel, **Yael Vinker**, Ariel Shamir, Daniel Cohen-Or. “Implicit Style-Content Separation using B-LoRA”. arXiv 2024 (under review).
- Rinon Gal*, **Yael Vinker***, Yuval Alaluf, Amit Bermano, Daniel Cohen-Or, Ariel Shamir, Gal Chechik. “Breathing Life Into Sketches Using Text-to-Video Priors”. The IEEE / CVF Computer Vision and Pattern Recognition Conference (CVPR 2024). **Highlight**
- Omri Avrahami, Amir Hertz, **Yael Vinker**, Moab Arar, Shlomi Fruchter, Ohad Fried, Daniel Cohen-Or, Dani Lischinski. “The Chosen One: Consistent Characters in Text-to-Image Diffusion Models”. ACM Transactions on Graphics (SIGGRAPH 2024)
- **Yael Vinker**, Andrey Voynov, Daniel Cohen-Or, Ariel Shamir. “Concept Decomposition for Visual Exploration and Inspiration”. ACM Transactions on Graphics (SIGGRAPH Asia 2023). **Best Paper Award**
- Kushin Mukherjee*, Holly Huey*, Xuanchen Lu*, **Yael Vinker**, Rio Aguina-Kang, Ariel Shamir, Judith Fan. “SEVA: Leveraging sketches to evaluate alignment between human and machine visual abstraction”. Advances in Neural Information Processing Systems (NeurIPS 2023)
- Kushin Mukherjee, Holly Huey, Xuanchen Lu, **Yael Vinker**, Ariel Shamir, Judith Fan. “Evaluating machine comprehension of sketch meaning at different levels of abstraction”. (CogSci 2023)
- Shir Iluz*, **Yael Vinker***, Amir Hertz, Daniel Berio, Daniel Cohen-Or, Ariel Shamir. “Word-as-Image for Semantic Typography”. ACM Transactions on Graphics (SIGGRAPH 2023). **Honorable Mention Best Paper Award**
- Hila Chefer*, Yuval Alaluf*, **Yael Vinker**, Lior Wolf, Daniel Cohen-Or. “Attend-and-Excite: Attention-Based Semantic Guidance for Text-to-Image Diffusion Models”. ACM Transactions on Graphics (SIGGRAPH 2023)
- **Yael Vinker**, Yuval Alaluf, Daniel Cohen-Or, Ariel Shamir. “CLIPascene: Scene Sketching with Different Types and Levels of Abstraction”. IEEE International Conference on Computer Vision (ICCV 2023). **Oral Presentation**
- **Yael Vinker**, Ehsan Pajouheshgar, Jessica Y. Bo, Roman C. Bachmann, Amit Bermano, Daniel Cohen-Or, Amir Zamir, Ariel Shamir. “CLIPasso: Semantically-Aware Object Sketching”. ACM Transactions on Graphics (SIGGRAPH 2022). **Best Paper Award**
- **Yael Vinker**, Inbar Huberman, Raanan Fattal. “Unpaired Learning for High Dynamic Range Image Tone Mapping”. IEEE International Conference on Computer Vision (ICCV 2021)

- **Yael Vinker***, Eliahu Horwitz*, Nir Zabari, Yedid Hoshen. “*Image Shape Manipulation from a Single Augmented Training Sample*”. IEEE International Conference on Computer Vision (ICCV 2021). **Oral Presentation**

Teaching

- **“Deep Neural Networks for Computer Graphics” at Tel Aviv University** 2023, 2024
 - Main lecturer with Prof. Daniel Cohen-Or
 - Developed the course syllabus, presentations, and logistics from scratch
 - The course had 57 participants and received a high rating from students (6.89/7)
- **Seminar in Neural Networks-Based Graphics at Tel Aviv University** 2022
 - Teaching assistant with Prof. Daniel Cohen-Or

Awards

- Tel Aviv University President's Award for Outstanding Postdoctoral Students Abroad, 2024
- Blavatnik Prize for Outstanding Israeli Doctoral Students in Computer Science, 2024
- Fulbright Postdoctoral Fellowship, 2024
- ACM Transactions on Graphics (SIGGRAPH Asia) 2023 **Best Paper Award** - For the paper “*Concept Decomposition for Visual Exploration and Inspiration*”.
- Scholarship for outstanding female PhD candidates, The Council for Higher Education (VATAT), 2023
- ACM Transactions on Graphics (SIGGRAPH) 2023 **Honorable Mention Best Paper Award** - For the paper “*Word-as-Image for Semantic Typography*”.
- ACM Transactions on Graphics (SIGGRAPH) 2022 **Best Paper Award** - For the paper “*CLIPasso: Semantically-Aware Object Sketching*”.
- Google Intern travel scholarship recipient for the 2019 Grace Hopper Celebration of Women in Computing Conference, Orlando
- The Hebrew University of Jerusalem, B.Sc., graduated magna cum laude

Experience

- **Student Researcher, Google Research** 2022 - 2023
Creative Camera team, Google TLV
 - Researcher in the field of generative models and large language-vision models
- **Research Intern, Summer@EPFL** Summer 2021
École polytechnique fédérale de Lausanne, Switzerland
 - Supervised by Prof. Amir Zamir at VILAB- Visual Intelligence and Learning Lab
- **Research Intern, Disney Research** February 2021- June 2021
DisneyResearch|Studios in Zurich, Switzerland
 - Supervised by Dr. Christopher Schroers and Dr. Roberto Azevedo
 - Deep learning for content-aware video compression
- **Software Engineer Intern, Google** July 2019 - March 2020
LiveResults Proactive team, Google TLV
 - Creating notifications and cards to display on the main page of the Google discover app
- **Software Engineer Intern, Google** August 2018 - January 2019
OneGoogle team, Google TLV
 - Creating common UI components used by all of Google’s mobile apps
- **IDF, The Technological Unit of the Intelligence Corps** 2014 - 2016
 - Project Leader - managing, connecting, and guiding multidisciplinary teams

Talks and Interviews

- Blavatnik Prize for Outstanding Israeli Doctoral Students in Computer Science, June 2024, "*Generative Visual Communication in the Era of Vision-Language Models*".
- QueenB Academy Month, April 2024. Sharing my academic journey with young female students.
- MIT CSAIL vision-graphics seminar, March 2024, "*Generative Models for Creative Applications*"
- MIT Media Lab, March 2024, "*Generative Models for Creative Applications*"
- Google VisCAM Seminar, March 2024, "*Generative Models for Creative Applications*"
- Adobe Research GenTech seminar, March 2024, "*Generative Models for Creative Applications*"
- Berkeley Computer Vision Seminar, March 2024, "*Generative Models for Creative Applications*"
- Graphics Cafe, Stanford University, March 2024, "*Generative Models for Creative Applications*"
- Weizmann Vision and AI Seminar, January 2024, "*Generative Models for Abstractions*"
- ICCV 2023, Paris, Oral presentation for "*CLIPascene: Scene Sketching with Different Types and Levels of Abstraction*"
- SIGGRAPH 2023, Los Angeles, Oral presentation for "*Word-as-Image for Semantic Typography*"
- Microsoft Data Science Bond, May 31, 2023 ([video](#))
- Lightricks Research Seminar, March 30, 2023
- Talking Papers Podcast - Interview with Itzik Ben Shabat, March 13, 2023 ([video](#))
- Israeli Computer Vision Day, January 16, 2023 ([video](#))
- RSIP Vision magazine, October 2022 ([article](#))

Community Involvement

- **Mentee and community member at Woman2Woman, 8200 Alumni Association** 2021
The program promotes talented women through personal mentoring processes with leading women from different frameworks in Israeli society
- **Mentor at Meduyakot, Tel Aviv University** 2022, 2024
The program aims to strengthen women's presence and leadership in exact sciences, in the program I serve as a mentor to female master's students

Languages Hebrew- native, English- fluent