Yael Vinker

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Education

- **P.hD 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: creativity, generative models, human perception

- **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