

## EDUCATION

**2015-2022:** Direct PhD track at the Computer Science Department, Technion

- Topic: Cognition Models in Deep Learning
- Visiting Scholar at University of Illinois at Urbana-Champaign (UIUC)
- Advisors: Prof. Tamir Hazan (Technion), Prof. Alexander G. Schwing (UIUC)

**2011-2015:** BSc at the Computer Science Department, Technion

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## PROFESSIONAL EXPERIENCE

**2022-?: Postdoc at the Deep Learning Lab**

Leading research on multi-modal applications under the supervision of Prof. Lior Wolf.

**2020-?: Head of Research at Spot by NetApp**

Leading the research team at Spot (acquired by NetApp). We develop data-driven algorithms based on the cloud behavior of thousands of customers.

**2019-2020: Senior Researcher at Microsoft (Search, Assistant and Intelligence group)**

I worked on deep learning models to extract action items from meeting transcripts (NLP).

**2016-2018: Senior Researcher at eBay (Catalog group)**

I led successful research on the deduplication of products using NLP and CV solutions, reducing eBay's overall duplicates from 30% to 12%. I had the pleasure of working with Dr. Ido Guy and Dr. Kira Radinsky.

**2011-2015: Software Developer at Intel**

I developed a framework for chip testing using C++ (Qt).

**2008-2011: Web Developer (IDF service)**

As a full-stack web developer, I worked on a system that processed millions of records.

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## PUBLICATIONS

**Diverse and Aligned Audio-to-Video Generation via Text-to-Video Model Adaptation; AAAI'23**

G. Yariv, I. Gat, S. Benaïm, L. Wolf, **I. Schwartz\***, Y. Adi\*

**Zero-shot video captioning with evolving pseudo-tokens; BMVC'23**

Y. Tewel, Y. Shalev, R. Nadler, **I. Schwartz**, L. Wolf

**AudioToken: Adaptation of Text-Conditioned Diffusion Models for Audio-to-Image Generation; INTERSPEECH'23**

G. Yariv, I. Gat, L. Wolf, Y. Adi\*, **I. Schwartz\***

**Discriminative Class Tokens for Text-to-Image Diffusion Models; ICCV'23**

**I. Schwartz**, V. Snæbjarnarson, H. Chefer, R. Cotterell, L. Wolf, S. Belongie, S. Benaïm

**Describing Sets of Images with Textual-PCA; EMNLP'22**

O. Hupert, **I. Schwartz**, L. Wolf

**Optimizing Relevance Maps of Vision Transformers Improves Robustness; NeurIPS'22**

H. Chefer, **I. Schwartz**, L. Wolf

**ZeroCap: Zero-Shot Image-to-Text Generation for Visual-Semantic Arithmetic; CVPR'22**

Y. Tewel, Y. Shalev, **I. Schwartz**, L. Wolf

**Video and Text Matching with Conditioned Embeddings; WACV'22**

A. Ali, **I. Schwartz**, T. Hazan, L. Wolf

**Ordered attention for coherent visual storytelling; ACM-MM'22**

T. Braude, I. Schwartz, A. ~G. Schwing, A. Shamir

**Latent space explanation by intervention; AAAI'22**

I. Gat, G. Lorberbom, I. Schwartz, T. Hazan

**Perceptual Score: Measuring Perceptiveness of Multi-Modal Classifiers; NeurIPS'21**

I. Gat, I. Schwartz, A.G Schwing

**Ensemble of MRR and NDCG models for Visual Dialog; NAACL'21**

I. Schwartz

- Winner in [Visual Dialog](#) challenge 2020

**Removing Bias in Multi-modal Classifiers: Regularization by Maximizing Functional Entropies; NeurIPS'2020**

I. Gat, I. Schwartz, A.G Schwing, T. Hazan

**Factor Graph Attention; CVPR'2019**

I. Schwartz, A.G. Schwing, T. Hazan

- First place in [Visual Dialog](#) 2019 challenge on MRR, R1, R5, R10 and Mean metrics

**Simple Baseline for Audio-Visual Scene-Aware Dialog; CVPR'2019**

I. Schwartz, A.G. Schwing, T. Hazan

**High-Order Attention Models for Visual Question Answering; NIPS'2017**

I. Schwartz, A.G. Schwing, T. Hazan

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**PATENTS**

**Interruption predictions for cloud compute instances (US20220129322A1)**

I. Schwartz, O. Muchnik, J. Cohen, K. McGrath, A. Shachar

**Search system for providing web crawling query prioritization based on classification operation performance (US11636164B2)**

I. Guy, I. Schwartz, K. Radinsky

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**PROGRAM COMMITTEE**

UAI'18; NIPS'18; ICLR'19; CVPR'19; ICML'19; ICCV'19; NeurIPS'19; ICLR'20; CVPR'20; ECCV'20; NeurIPS'20; AAAI'20; CVPR'21; ICCV'21; AAAI'21, NeurIPS'21; WACV'22; ICML'22; AAAI'22; CVPR'22; NeurIPS'22; ICCV'23

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**TEACHING  
EXPERIENCE**

- **Lecturer:** Autumn Data Science School with Dr. Kira Radinsky
  - **Guest Lecturer:** Deep Learning (097200, 236606); Natural Language Processing (097215); Deep Learning for Natural Language Processing (232601)
  - **Teaching assistant in charge:** Advanced Data Science (236605)
  - **Teaching assistant in charge:** Theory of Compilation (236360)
  - **Teaching assistant:** Introduction to Software Design (234122)
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