IDAN SCHWARTZ

idanschwartz@gmail.com | https://idansc.github.io/ | github: idansc

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

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.

PUBLICATIONS

Diverse and Aligned Audio-to-Video Generation via Text-to-Video Model Adaptation; AAAI'23
G. Yariv, I. Gat, S. Benaim, 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. Benaim

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

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

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

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)