

# ASSAF SHOCHER

assafshocher@gmail.com, +972(0)544839866

## EDUCATION

### **Weizmann Institute of Science – MSc, PhD (ongoing). Math&CS Dept. (2015 – Today)**

- Advisor: Prof. Michal Irani.
- Thesis: Deep Internal Learning.
- Direct PhD track.
- Outstanding MSc Award.
- Teaching Assistant:
  - Introduction to Computer Vision (Fall 2016-2017).
  - Advanced Topics in Deep-Learning and Computer Vision (Spring 2016-2020).

### **Ben-Gurion University – BSc- Physics, BSc- Electrical Engineering (2011 – 2014)**

- EE Specializations: Signal Processing and Electro-Optics.
- Graduated with honors.
- Best Student Final Project Award and Scholarship.

## JOB EXPERIENCE

### **Research Intern; Google Inc. (2019)**

Academic research, Deep Generative Models. Advised by Prof. William T. Freeman.

### **Lecturer; Primrose Deep Learning Academy (2016 – Today)**

Teaching full year courses of Machine Learning and Deep Learning from theory to practice.

### **Data Scientist; EverythingMe (2015)**

Machine Learning for the goal of a mobile device that understands the user better.

### **Co-Founder and ML team leader; Prophit (2014 – 2015)**

R&D of market prediction algorithms. Experience in leading, executing projects and capital raising.

### **Researcher; Zlotowski Center for Neuroscience (BGU) (2014 – 2015)**

Research of algorithms to describe functional brain connectivity using fMRI image processing.

### **Signal processing and Control Engineer; Elbit Systems (2013 – 2014)**

Student Position; Algorithms for processing signals received from Inertial Navigation Systems.

### **Military Service (2004 – 2009)**

Combat officer positions up to company commander, the field intelligence corps.

## PUBLICATIONS

#### **Semantic Pyramid for Image Generation**

Shocher, Gandelsman, Mosseri, Yarom, Irani, Freeman, Dekel (CVPR'20 Oral Presentation)

#### **From Discrete to Continuous Convolution Layers**

Shocher, Feinstein, Haim, Irani (arXiv'20, Currently under review)

#### **KernelGAN: Blind Super-Resolution Kernel Estimation using an Internal-GAN**

Bell-Kligler, Shocher, Irani (NeurIPS'19 Oral Presentation)

#### **InGAN: Capturing and Retargeting the "DNA" of a Natural Image;**

Shocher, Bagon, Isola, Irani (ICCV'19 Oral Presentation)

#### **Double-DIP: Unsupervised Image Decomposition via Coupled Deep-Image-Priors**

Gandelsman, Shocher, Irani (CVPR'19 Oral Presentation)

#### **Zero-Shot Super-Resolution using Deep Internal Learning**

Shocher, Cohen, Irani (CVPR'18)

#### **Evaluation of Functional Brain Connectivity Abnormalities via fMRI**

Shocher, Kushinsky, Veksler, Friedman, Shallom (IEEE'14)

## HONORS & AWARDS

- Weizmann Institute of Science award for outstanding MSc.
- Ben-Gurion University; Graduated with honors.
- Ben-Gurion University; EE Dept. Best Student Final Project Award and Scholarship.