Eli Schwartz – CV

Eli.shw@gmail.com +972-505-790959 Derech Hayam 75a, Haifa, Israel

Education

2016-Present **M.Sc. Electrical Engineering, Tel Aviv University, Israel**

- Advisors – Dr. Raja Giryes and Prof. Alex Bronstein
- Thesis – Deep Learning for Low Level Vision (Denoising/Demosaicing/Full ISP)
- Selected courses – Computer Vision, Advanced Topics in Computer Vision, Computational Photography, Video Processing and Analysis, Optimization
- Supervised undergrad students final project on the subject of deep learning based vision

2007-2011 **B.Sc. Electrical Engineering, Technion, Israel**

- Specialized in - Signal and Image Processing, Computer Engineering, Biological signals and Systems
- Final project - Detection of manipulations ("photoshopping") in images
    - The project won the Thomas Schwartz Award for outstanding projects in image processing and computer vision

Employment

2017-Present **Computer Vision Researcher - IBM**

- Doing research in the field of deep learning for object detection

2015-2017 **Co-founder & CTO – Inka Robotics**

- A startup developing a vision-based autonomous tattooing robot
- Led the technical team developing algorithms, software & micro-controllers
- Turn it from idea to a working prototype (that tattooed my leg)

2013-2016 **Computer Vision Algorithm Engineer – Microsoft**

- Worked on the HoloLens Project (augmented reality smart glasses)
- Part of an incubation team – fast development of PoC for innovative technologies
- Developed computer vision algorithms for 3D cameras and Gaze tracking
- Developed algorithms in Matlab & performance critical implementations in C++

2011-2013 **ASIC Engineer – Qualcomm**

- Formal verification technical lead
- Functional verification

2008-2011 **ASIC Engineering Intern – IBM**

- ASIC formal and functional verification

2002-2005 **Military Service** - Combat military service in the Armored Corps, IDF

Languages

- Hebrew - Mother tongue
- English – fluent

Programing languages and environments

TensorFlow/Pytorch/ Theano, OpenCV, Python, Matlab, C++, C, Windows, Linux

Publications and Patents

- **E. Schwartz**, R. Giryes and A. M. Bronstein, “DeepISP: Learning End-to-End Image Processing Pipeline”, submitted to IEEE Transactions on Image Processing, 2018.
- C. Baskin*, **E. Schwartz***, E. Zheltonozhskii, N. Liss, R. Giryes, A. M. Bronstein and A. Mendelson, “UNIQ: Uniform Noise Injection for the Quantization of Neural Networks”, submitted to ICML, 2018.
- E. Shalev, S. Katz, and **E. Schwartz**. "Imaging devices and methods for authenticating a user." U.S. Patent Application No. 14/995,025.