

# Eli Schwartz – CV

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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**
- Conducting 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.