

# AMITAI KORETZ

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Harav Berlin 35/8, Jerusalem

Born May 7, 1982 ◇ Married + 3

## OVERVIEW

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- NLP, Computer Vision, Data Science, Algorithms.
- Leadership, Hands-on skills, Theoretical background.

## EDUCATION

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**Ben Gurion University of the Negev**  
*M.Sc., Electrical & Computer Engineering*

2008 - 2009

*Beer-Sheva, Israel*

- Cum Laude (GPA 93.9/100).
- Area: Statistical Signal Processing.
- Thesis topic: Maximum A-Posteriori Probability Multiple Pitch Tracking Using the Harmonic Model.
- Advisor: Prof. Joseph Tabrikian.
- Tracks: Signal Processing and Computers.

**Ben Gurion University of the Negev**  
*B.Sc., Electrical & Computer Engineering*

2004 - 2008

*Beer-Sheva, Israel*

- Magna Cum Laude (GPA 94.6/100).
- Placed 2/152 of graduating class.

## EXPERIENCE

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**Touchcast**  
*Head of Artificial Intelligence*

August 2021 - Present

*Remote*

- Led the design and development of several AI projects in the area of NLP, including: Semantic Search, Conversational Agent, Text and Video Intelligence.
- Hired and managed a small team of machine learning engineers, in addition to external contractors.
- End-to-end delivery into a cloud-native, microservices-driven environment.

**Grin**  
*Algorithms Tech Lead*

April 2020 - July 2021

*Tel Aviv, Israel*

- As the first member of the algorithms team, designed and launched a core technology project from scratch: A system for measuring teeth motions and updating a 3D model over the course of orthodontic treatment using a cellphone camera.
- Applied techniques from computer vision and geometry processing, including differentiable rendering.
- Tools: PyTorch3D, OpenCV, libigl, Blender.

**ZipRecruiter Israel**  
*Senior Data Scientist*

March 2018 - April 2020

*Tel Aviv, Israel*

- Designed, built and deployed a resume parser tool using deep learning/NLP techniques.
- Conducted empirical research around resume parser, including building tools for visual inspection and evaluation.
- Advised colleagues on various machine learning projects.

- Tools: Python, TensorFlow, **R**, Shiny, Git.

### **Fifth Dimension**

*Data Scientist*

2017 - 2018

*Tel Aviv, Israel*

- Analysis and modeling of various data sets.
- Focus on text mining / NLP.
- Tools: R, Python, Shiny, Git.

### **Medasense Biometrics**

*Algorithms Engineer*

2016 - 2017

*Ramat Gan, Israel*

- Performed machine learning and data analysis techniques on biomedical data gathered from multiple sensors.
- Implemented a data-processing pipeline using open-source tools.
- Tools: R, MATLAB, Git, Python.

### **Hebrew University of Jerusalem**

*PhD Student*

2014 - 2015

*Jerusalem, Israel*

- Area: Convex Optimization/Statistical Signal Processing.
- Advisor: Prof. Ami Wiesel.
- Teaching Assistant for Random Signals and Variables course.
- *Left program without graduating.*

### **BrightSource Energy**

*Algorithms and Software Engineer*

2012 - 2014

*Jerusalem, Israel*

- Design and implementation of computer vision algorithms for solar field cameras.
- Worked on production level software for integrated solar field control system.
- Modeling algorithms for automated solar field mirror control.
- Tools: C++, Boost, OpenCV, MATLAB, Mercurial.

### **Audiocodes/NSC**

*Algorithms Engineer*

2009 -2012

*Airport City, Israel*

- R&D in automatic speech recognition (ASR).
- Designed and implemented automatic processes for training acoustic models and accept/reject models.
- Worked with supervised learning and classification techniques.
- Tools: Perl, C, HTK, MATLAB.

### **Ben Gurion University of the Negev**

*Teaching Assistant*

2007 - 2008

*Beer-Sheva, Israel*

- Introduction to Linear Systems.
- Introduction to Electrical Engineering for Mechanical Engineers.

### **Ben Gurion University of the Negev**

*Research Assistant*

2007

*Beer-Sheva, Israel*

- Worked on spatial beamforming methods in spherical microphone arrays during 3rd year of B.Sc.
- Advisor: Prof. Boaz Rafaely.

### **Israel Air Force**

*Military Service*

2001 - 2004

*Tel Aviv, Israel*

- Full 3 year service in IAF Intelligence.

- Data analysis/research.
- Information Systems/Web design.

## **SKILLS**

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- R, Shiny, Python, TensorFlow, L<sup>A</sup>T<sub>E</sub>X, Git, Mercurial, C++, MATLAB.
- Excellent communication skills, fast learner.
- Mathematical orientation.
- Fluency in English and Hebrew (native English speaker).

## **AWARDS**

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- Freescale prize for direct M.Sc. track students (2008).
- Yaakov ben Yitzhak HaCohen fund scholarship (2008).
- Wolf Foundation scholarship (2007).
- Deans award (2007).
- Rectors award (2006).