

## Neta Rabin, Ph.D

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### Personal Information

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*phone:* 054-4919735  
*address:* 34 Shoham Matityahu st., Tel-Aviv.  
*Birth date:* July 5<sup>th</sup> 1977, Israel.  
*Marital status:* Married + 3 children.  
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### Research Interests

Data-driven mathematical modeling, machine learning, kernel based methods, diffusion based manifold learning, approximation of and extrapolation of scattered data, applied and computational harmonic analysis, signal processing and data fusion.

### Education

1997-2001  
Tel-Aviv University, Tel-Aviv, Israel  
B.Sc. in Mathematics and Computer Science.

2002-2004  
Tel-Aviv University, Tel-Aviv, Israel  
School of Computer Science  
M.Sc. (with distinctions) in Computer Science  
Thesis Title: Edge enhancement postprocessing using artificial dissipation  
Supervisor: Prof. Amir Averbuch

2005-2009  
Tel-Aviv University, Tel-Aviv, Israel  
School of Computer Science  
Ph.D. in Computer Science  
Thesis Title: Data mining of dynamically evolving systems via diffusion methodologies  
Supervisor: Prof. Amir Averbuch  
Date Awarded: Approved March 2010

### Further Studies

2009 - 2012  
Yale University, New Haven, CT., USA  
Department of Applied Mathematics  
Gibbs Assistant Professor  
Host: Prof. Ronald Coifman

### Academic Experience

2012-2014  
Afeka - Tel-Aviv Academic College of Engineering, Tel-Aviv, Israel  
Department of Exact Sciences  
Lecturer

2014-present  
Afeka - Tel-Aviv Academic College of Engineering, Tel-Aviv, Israel  
Unit of Mathematics  
Senior Lecturer

## Academic and Professional Awards

## External Grants

- 2007-2009  
Eshkol fellowship, PI, 192,000 NIS,  
Title: Data mining of dynamically evolving systems via diffusion methodologies, Ministry of Science, Israel.
- 2011  
IPAM travel grant, Machine Reasoning Workshop, Sep. 2010, The Institute for Pure and Applied Mathematics (IPAM), UCLA, CA USA.
- 2011  
IPAM travel grant, Optimization, Search and Graph-Theoretical Algorithms for Chemical Compound Space Workshop, April, 2011, The Institute for Pure and Applied Mathematics (IPAM), UCLA, CA USA.
- 2012  
Society for Industrial and Applied Mathematics (SIAM) travel grant, The Twelfth SIAM International Conference on Data Mining, April 2012, Anaheim, CA USA.
- 2013  
The NITE Research Fund, Co-PI, 25,000 NIS,  
Title: Evaluating the Effectiveness of Adjustments Given to Engineering Students  
Co-Researchers: Dr. Maya Golan, Dr. Gonen Singer, Dr. Dvir Kleper  
National Institute for Testing and Evaluation, Jerusalem, Israel
- 2014  
Israeli Ministry of Defence (MAFAAT), Co-PI, 300,000 NIS,  
Title: Speaker Diarisation  
Co-Researchers: Prof. Ami Moyal and Dr. Itshak Lapidot  
Ministry of Defence, Israel.
- 2014-2016  
The PAZY Foundation, PI, 150,000 NIS,  
Title: Advanced Machine Learning Methods for Event Discrimination  
Co-Researchers: Dr. Yuri Bregman, Prof. Amir Averbuch and Dr. Yochai Ben-Horin  
The Israeli University Planning and Budgeting Committee and the Israeli Atomic Energy Commission.
- 2019-2020  
The Israeli Medical Corps, Co-PI, 90,000 NIS,  
Title: Development and Assessment of an Algorithm for Knee Pathologies Diagnosis Based on Non-invasive Thermal Imaging  
Co-Researchers: Dr. Zehava Blechman, Dr. Lilach Gavish, Dr. Oshrit Hoffer, Dr. Arnon Gam and Dr. Elad Spitzer  
MAFAAT and the Medical Corps (IDF).

## Scholarships

- 2007-2009  
Eshkol fellowship, PI, 192,000 NIS

Title: Data mining of dynamically evolving systems via diffusion methodologies  
Ministry of Science, Israel.

- 2007  
Women in Science fellowship, PI, 64,000 NIS  
Ministry of Science, Israel, (declined due to “Eshkol”).

### **Prizes**

- 2008  
Excellent Ph.D Student Award  
School of Computer Science, Tel Aviv University, Tel-Aviv, Israel.
- 2014, 2015, 2017  
Excellence in Research, Afeka, Tel-Aviv, Israel
- 2015, 2016, 2017, 2018  
Excellence in Teaching, Afeka, Tel-Aviv, Israel
- 2015, 2018  
Excellence Award for Instruction of B.Sc. Final Projects, Afeka, Tel-Aviv, Israel
- 2018  
Award for Social Engagement, Afeka, Tel-Aviv, Israel