

Boris Gorelik, Ph.D

Data scientist, algorithm developer, lecturer. Solving tough problems since 2001.

+972-52-5974655 | boris@gorelik.net | <https://gorelik.net> |

Skills

Programming languages

Python: currently proficient

R, Matlab, C++, Perl: extensive prior experience

Methods and techniques

Recommender systems; Machine learning; Anomaly detection; Fraud detection; Social network analysis; Classification and regression; Data visualization; Optimization algorithms; Molecular modeling.

Online

<https://gorelik.net/blog>

https://twitter.com/boris_gorelik

Past and Present

May 2014 – Today

Automattic, Inc | WordPress.com

Data scientist

Being a data scientist at Automattic means providing answers and insights to ad-hoc questions; developing algorithms and deploying working solutions to the production.

- Recommender systems
- Anomaly detection in time series.
- Social interactions within the WordPress.com network.
- Developed a spam detection model.
- Developed and implemented churn prediction model.
- Ongoing data analysis support for various internal teams extraction and statistical analysis of behavioural analysis of behavioral data.

Ongoing, part-time

Lecturer: Data visualization; Data-based decision making

Teching two college courses in the Azrieli College of Engineering Jerusalem. Also tough at the Holon Institute of Technology and Israel Tech Challenge project

Dec 2012 – May 2014

RSA, The Security Division of EMC

Principal Research Scientist, CTO Identity Protection & Verification

- Developed and utilized statistical analysis and measurement methods applied to real-life transaction records of several of top 20 banks.
- Core developer of a new unsupervised method for authentication fraud detection. In this project I co-designed the algorithm, optimized its performance and tested it on tens of millions real-life data points. The algorithm has been shown to provide excellent results with online banks, investment firms and healthcare provider data.

Jun 2012 – Feb 2013

Procognia Ltd

Head of software and bioinformatics

- Direct responsibility for data science aspects of every activity in the company.
- Project management.
- Experiment design and analysis.
- Statistical data analysis.

Jan 2009 – Feb 2013

Senior bioinformatician and data scientist

- Re-implemented and improved company's flagship bioinformatics model in extra-tight time frame.
- Was in charge with company's major machine learning project (supervised learning on noisy data).
- Originated and lead a constrain-based optimization project for integrating real-life data.

Mar 2007 – Jan 2009

Optimata Ltd

Simulation scientist and PK/PD expert

- Developed novel methods for population modeling.
- Mechanistic and statistical modeling.
- Lead two major projects from design to completion.
- Re-wrote company's Pharmacokinetic/Pharmacodynamic (PK/PD) mathematical models.

2001 – 2007

The Hebrew University of Jerusalem

Molecular docking and optimization algorithms

PhD studies in computational chemistry under the supervision of Prof. A. Goldblum.

- Development of ISE – a general purpose optimization algorithm (implemented in C++).
- Wrote a program for energy driven optimization of 3D structures, that performs better than three world's most cited programs in the field.
- Extensive experience in algorithm development, molecular modeling and dynamics.

Education

Ph.D

The Hebrew University of Jerusalem, 2007

Direct Ph.D in computational chemistry program for excelling students. Advisor: Prof. Amiram Goldblum.

Thesis title: Predicting Protein-Ligand Interactions using Iterative Stochastic Elimination Algorithm

B.Pharm

The Hebrew University of Jerusalem, 2001