

Itay Ben-Dan

Haarava 20, Herzliya P. O. Box 5990, Herzliya, Israel 46100 Cellular: +972544539284  
Email: itaybd@gmail.com

## Professional Summary

Full Stack Machine Learning Engineer with extensive experience in data engineering, model development, deployment, and maintenance. Expertise in sports, finance, and robotics, with a focus on advanced data analytics and machine learning, including LLMs and multi-agent systems.

## Work Experience

2017-Present: Machine Learning and Data Science Consultant

- Developed predictive models from scratch, including deployment.
- Conducted exploratory data analysis and advanced feature generation.
- Integrated data from various sources into unified formats.
- Developed policy generative models using reinforcement learning.

2017-Present: Founder and Head of Research, Finzor Ltd.

- Developed portfolio management and investment analysis tools.
- Led a team to deliver software products from design to production.

2016-2017: Principal Machine Learning, Palo Alto Networks

- Applied machine learning to reverse engineering and malware analysis.
- Created adaptive models for updating anti-malware filters and classifiers.

2015-2016: Senior Data Scientist, SparkBeyond

- Worked on big data predictive analytics and machine learning.
- Applied automatic feature generation methods to time series analysis and reinforcement

learning.

2011-2015: Senior Quantitative Researcher, WorldQuant

- Developed automated computational methods for quant-driven strategies. ● Applied predictive analytics and statistical methods across various assets.

2010-2011: Senior Software Engineer, Broadcom

- Designed network and packet processing methodologies. ● Implemented advanced automated testing methods.

2008-2009: Founder, Genous Vision

- Developed algorithms for recognizing anatomies in ultrasound images.

## Education

2009: Ph.D. in Mathematics, Technion, Haifa

- Topic: Discrete Geometry ● Supervisor: Dr. Rom Pinchasi

2004: M.Sc. in Mathematics, Technion, Haifa

- Topic: Game Theory ● Thesis: Time Sharing under Dichotomous Preferences ● Grade: 95 ● Supervisor: Prof. Ron Holzman

2002: B.Sc. in Mathematics and Computer Science, Technion, Haifa

- Cum Laude

## Skills

- Programming Languages: Python, R, C++, Java ● Machine Learning Frameworks: TensorFlow, PyTorch, Scikit-learn ● Data Analysis Tools: Pandas, NumPy, SQL ● Other Technologies: Docker, Kubernetes, AWS, Git, Linux

## Projects

TreeModelVis

● Visualization tool for tree-based models, aiding in understanding decision paths and feature importance.

● Technologies Used: Python, D3.js ● GitHub Repository

## Publications

● Points with Large Quadrant Depth. JoCG 2(1): 128-143 (2011) ● Points with large quadrant depth. Symposium on Computational Geometry 2010:

358-364

● On a problem about quadrant depth. Comput. Geom. 43(6-7): 587-592 (2010) ● Points with large alphadepth. J. Comb. Theory, Ser. A 116(3): 747-755 (2009)

## Contact Information

● Email: itaybd@gmail.com ● LinkedIn: Itay Ben-Dan LinkedIn Profile

This CV is concise and tailored, highlighting key skills and experience in a clean, organized format.

Best regards,

**Itay Ben-Dan**