

# Uri Itai, Ph.D.

■ uri.itai@gmail.com | ■ +972-522633810 | LinkedIn | Medium

## Summary

Ph.D. in Applied Mathematics with 10+ years of experience as a Data Scientist and Algorithm Developer. Specialized in ML/AI for financial analytics, cybersecurity, healthcare, and generative AI. Proven track record in building and deploying production-ready ML pipelines, leading cross-functional teams, and integrating cutting-edge theory into real-world applications. Passionate about explainable AI, model reliability, and scaling data science solutions.

## Core Skills

- ML/AI & GenAI: XGBoost, CatBoost, SHAP, Transformers, LLMs, Explainable AI
- Engineering & Deployment: Python, SQL, MLflow, Airflow, Docker, Git
- Data Domains: Financial analytics, Bio-imaging, Cybersecurity, Algorithmic trading
- Leadership & Teaching: Team management, cross-disciplinary collaboration, academic lecturing

## Professional Experience

### Independent Consultant — Senior Data Scientist (2023 – Present)

- Delivered financial data analysis projects driving strategic decisions.
- Built AI feature extraction pipelines for low-resolution imaging.
- Integrated LLMs into customer products to enhance feature sets.
- Advised firms on AI strategy and managed implementation roadmaps.

### TRST AI — Senior Data Scientist (Managerial Role) (2021 – 2022)

- Directed AI initiatives for AI reliability & trustworthiness in finance.
- Championed ethical AI and explainability in deployed systems.
- Mentored and led teams, ensuring alignment with company objectives.

### Qualitest AI Team — Senior Data Scientist (Managerial Role) (2020 – 2021)

- Designed AI systems for logfile analysis and predictive maintenance.
- Led cross-team projects to resolve connectivity failures with ML.
- Managed project timelines and mentored junior data scientists.

### Saferide — Data Scientist (Cybersecurity AI Team) (2019 – 2021)

- Developed ML models to detect cyberattacks on automotive CAN-Bus data.
- Pioneered unsupervised learning methods for anomaly detection.

### Knowmail — Senior Data Scientist (2017 – 2019)

- Designed algorithms predicting user behavior from email data, boosting productivity.

### Savicell — Data Scientist (2015 – 2017)

- Led team creating ML models for early cancer detection via liquid biopsy.

### Algo-Trading Firms — Algorithm Developer (2010 – 2014)

- Built predictive models and time-series trading strategies, achieving consistent returns.

## Academic & Teaching Roles

- Lecturer, Holon Institute of Technology (2023 – Present) — Graduate ML program (cybersecurity & bio-imaging).
- Lecturer, GTIIT (Technion Branch, China) (2024 – Present) — Teaching Python & Probability.
- Head Lecturer, Primrose AI College (2019) — Designed inaugural ML course.
- Teaching Assistant, Technion (2001 – 2010).

## Education

- Ph.D. Applied Mathematics, Technion – Israel Institute of Technology (2012)

- M.Sc. Mathematics, Technion (2005)
- B.A. Mathematics, Technion (2001)

### **Publications & Talks (Selected)**

- Parametric PDF for Goodness of Fit (ResearchGate, 2023)
- Goodness of Fit Metrics for Multi-Class (arXiv, 2022)
- Bounding Pandemic Spread by Heat Spread (Journal of Eng. Math, 2023)
- Speaker at PyData Tel Aviv (2022), Hayadata Conf. (2022), Big Data Meetup (2021)

### **Awards**

- 2nd Place – Amdocs Hackathon (2023) — Automated malicious comment detection on social media.
- Referee at Data Hackathons (2017–2019).