

# Maya Kovalevsky

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[Maya Kovalevsky | LinkedIn](#)

Driven scientist with a strong analytical mindset and hands-on experience across data analysis, data science and biomedical engineering.

## SKILLS

- **Data Analysis Tools:** SQL, Excel, Tableau, PowerBI
- **Programming Languages:** Python, MATLAB
- **Databases:** MySQL, PostgreSQL
- **Data Processing and visualization:** Pandas, NumPy, Matplotlib, Seaborn, Plotly

## PROFESSIONAL EXPERIENCE

### 2017-2024 - Data Analyst | Biomedical Engineer, *Insightec*

- Quantitative Data Analysis: Conducted data mining and quantitative analysis on clinical and pre-clinical datasets to derive actionable insights, utilizing Python scripting and SQL to support decision-making in product development.
- Tool Development for Quality Assurance: Built and maintained databases in Python and SQL, optimizing data quality, organization, and retrieval. Automated data collection and cleaning processes, which reduced preparation time and enhanced data integrity.
- Algorithm Testing & Validation: Performed validation testing to ensure accuracy and consistency in data analysis processes. Documented findings and quality checks, contributing to data-driven product improvement.
- Cross-Team Collaboration: Partnered with R&D and scientific teams to ensure alignment on data standards and quality requirements, translating complex data into clear insights for diverse stakeholders.
- Data Visualization & Reporting: Developed visualizations and reports using Python libraries (Matplotlib, Seaborn, plotly) and PowerBI to communicate trends, enabling data-driven decisions and enhancing transparency with stakeholders.

### 2014-2017 - Masters Researcher | Biomedical Engineering, *Technion*

- Data Analysis & Statistical Application: Designed and analyzed in-vivo experiments, applying statistical principles to extract meaningful insights from physiological data. Developed signal processing algorithms in Matlab to assess complex biomedical data.
- Visualization & Reporting: Created visual representations of data findings, effectively communicating complex results to support academic publications and further research objectives.

### 2016-2017 - Teaching assistant, Biomedical Engineering, *Technion*

- Taught the "Introduction to Control in Biomedical Systems" course – frontal lectures
- Instructed the "Muscle Physiology" laboratory course – designed/prepared experiments

### 2013-2014 - Quality and Operation Engineer, *Ascent Medical Israel*

- Prepared and submitted registrations for medical device import to the Ministry of Health, ensuring adherence to quality standards (ISO 9001:2008) and maintenance of quality control documents.
- Provided training to sales representatives on new medical equipment.

## EDUCATION

### 2014-2017 - M.Sc. in Biomedical Engineering, *Technion-Institute of Technology*

Thesis: A novel cardiac reserve index of monitoring cardiac function, based on the interplay between external work and pressure-time integral. (**Advisor:** Assoc. Prof. Amir Landesberg). (Final Grade: 91)

### 2012 - Clinical research associate (CRA) certificate, "Pharma Job" Bio-Medical college.

### 2008-2012 - B.Sc. in Biomedical Engineering (Biomechanics track), *Ben-Gurion University*.

## MILITARY SERVICE & OTHER

### 2006-2008 - Military service: sport instructor, Israeli Air Force.

### 2012-Today member of the Masters swimming team

## PUBLICATIONS

1. Myung Ji Kim, So Hee Park, Kyung Won Chang, Yuhee Kim, Jing Gao, **Maya Kovalevsky**, et al. Technical and operative factors affecting magnetic resonance imaging-guided focused ultrasound thalamotomy for essential tremor: experience from 250 treatments. *J Neurosurg* 2021 May 21;135(6):1780-1788
2. Jan Klein et al. (Including Maya Kovalevsky). Automatic planning of MR-guided transcranial focused ultrasound treatment for essential tremor. *Front Neuroimaging* 2023 Oct 26;2:1272061