OMER TAUB

COMPUTER SCIENCE GRADUATE - CUM LAUDE & MSC CANDIDATE IN COMPUTER SCIENCE



MSc candidate in Computer Science and cum laude BSc graduate in Computer Science, specializing in Deep Learning, Computer Vision, and LLMs, with proven experience in developing Al solutions.

Experience

2024-present Cornell University

Excellence Internship Program, Research Intern

- · Supervised by Prof. Mert Sabuncu.
- Developed RealKeyMorph: a deep learning-based 3D MRI resolution agnostic image registration algorithm.
- · Designed a 3D MRI super-resolution model to enhance clinical image quality.

2024-present Camtek

Computer Vision Student Researcher, CTO Team

- Developing advanced deep learning models for super-resolution, image quality enhancement and anomaly detection.
- Designed and implemented automated semantic segmentation models to streamline image analysis.

2022-2024 IBM-Research

Machine Learning Research Student, Al Quality Group

- Built a globally deployed tool for IBM LLM researchers to test hypotheses using few-shot techniques on internal models.
- Contributed to IBM's LLM Models by developing an LSTM classifier to predict code-to-code translation performance.

Education

2025-present Tel Aviv University

MSc candidate in Computer Science

- Joint Supervision by Prof. Hayit Greenspan (TAU) & Prof. Mert Sabuncu (Cornell University).
- Focusing on the intersection of Deep Learning, Computer Vision, and Medical Imaging.

2021-2024 Technion - Israel Institute of Technology

BSc Computer Science Graduate

- · Graduated with GPA 91.1 Cum Laude
- · Consistently on Rector's list or Dean's list.
- Completed a project in the Geometric Image Processing Lab (GIP), developing deep learning algorithms to predict cancer outcomes from histopathology H&E images

Military Service

2014-2018

- Pilot Training Course, Israeli Air Force (1.5 years).
- · Combat Fighter, Elite Unit Sky Rider.
- Security & Protection Services, Israel Security Agency (Shabak), Undercover Operations.

Papers

• A. Q. Wang, M. C. Moghadam, <u>O. Taub</u>, M. R. Prince and M. R. Sabuncu, "RealKeyMorph: Keypoints in Real-world Coordinates for Resolution-agnostic Image Registration", submitted to MIDL 2025 - <u>paper</u>, <u>code</u>