

Maxwell Tsai

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<https://mxtsai.github.io/>

Computer Vision & Deep Learning Researcher

ACHIEVEMENTS

- **Spotlight Presentation²** – MICCAI LABELS Workshop, 2020
- **Spotlight Presentation¹** – MIDL Conference, 2020
- **Magna Cum Laude** – Tel Aviv University, 2015–2019
- **Accelerated MS.c. Track** – Tel Aviv University, 2018–present
- **Rank of Excellence (2nd Place)** – Intel ISEF Competition China, 2014

RESEARCH PROJECTS

Researcher @ Sheba Medical Center, April 2018–September 2020

- Lead the development of a COVID-19 lung CT screening system in Sheba (currently undergoing pilot tests)
- Developed an automated knee MRI diagnosis algorithm (tested by the Head Radiologist of the MSK Department)
- Implemented a text analytics algorithm for labeling breast MRI reports written in Hebrew and English

Java Face, 2013–2014

- Implemented a facial recognition system on Java (non-existent at the time)
- Achieved 2nd place in the 2014 Intel ISEF with 60+ competitors from across China

PUBLICATIONS

¹*Knee Injury Detection using MRI with Efficiently-Layered Network (ELNet)*

²*Labeling of Multilingual Breast MRI Reports*

EDUCATION

Tel Aviv University — Masters of Science, 2018–2020
Supervised by Prof. Nahum Kiryati and Dr. Arnaldo Mayer

Electrical and Electronics Engineering GPA : 90

Tel Aviv University — Bachelor of Science, 2015–2019

Electrical and Electronics Engineering GPA : 92

M.Sc. Courses

- **Advanced Topics in Machine Learning**
- **Computer Vision**
- **Natural Language Processing**
- **Statistical Machine Learning**
- **Optimization**
- **Digital Processing of Single and Multi-Dimensional Signals**
- **Design and Analysis of Algorithms**

RESEARCH EXPERIENCE

- Computer Vision
- Natural Language Processing
- Supervised Learning
- Weakly Supervised Learning
- Semi-Supervised Learning

DEV RECORD

Current:

- Python
- PyTorch
- Tensorflow
- MATLAB

Past :

- C
- C++
- Java (AP certified)
- Adobe ActionScript
- Objective-C
- Processing
- Arduino
- HTML

ONLINE COURSES

- CS231N - Stanford
- Machine Learning
- Fundamentals of Digital Image & Video Processing

LANGUAGES

- English (proficient)
- Chinese (mother tongue)

¹<https://arxiv.org/abs/2005.02706>

²<https://arxiv.org/abs/2007.03028>