Maxwell Tsai

Computer Vision & Deep Learning Engineer

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https://mxtsai.github.io/
LinkedIn
GitHub

ACHIEVEMENTS

- **Spotlight Presentation**[2] - MICCAI LABELS Workshop, 2020
- **Spotlight Presentation**[1] - MIDL Conference, 2020
- **Magna Cum Laude** - Tel Aviv University, 2015-2019
- **Accelerated MS.c. Track** - Tel Aviv University, 2018-2020
- **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 (underwent 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
· Generative Models (Images)
· Supervised Learning
· Weakly Supervised Learning
· Semi-Supervised Learning
· Knowledge Distillation

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*