

SUMMARY

Deep learning researcher with a M.Sc. in Computer Science and 5 years of experience across computer vision and NLP. Specializing in multi-modal AI systems with expertise in model architecture innovation and end-to-end machine learning development. Passionate about advancing multi-modal research that bridges text, visual, and 3D domains.

EXPERIENCE

Deep Learning Researcher

Leo AI

May 2023 – Present

- Led innovation in LLM/LMM architecture design, introducing novel modifications during pre-training and fine-tuning that significantly advanced text and 3D generation capabilities.
- Drove full lifecycle development of text, image, and point clouds representation, from data acquisition (scraping, filtering, rendering, augmentation) to training and deploying CLIP-based models with custom 3D extensions.
- Enhanced dataset quality through Vision-Language Model integration, creating superior training data that significantly improved downstream task performance.

NLP Researcher

Microsoft

Oct 2021 – May 2023

- Developed, trained, and deployed machine learning models for extracting and ranking captions for search items. The new model improved Office 365 search by reducing the number of unsuccessful clicks by 5%.
- Developed and evaluated extractive and abstractive summarization models, including ML models, BERT, and GPT.
- Utilized GPT-3.5 to create datasets using advanced methods such as batch prompting and multi-task prompting to reduce the number of API calls and implemented a chain-of-thoughts (COT) approach to improve model results.

Computer Vision Research Team Lead

IDF, Ground Forces

Apr 2020 – Sep 2021

- Established and led a research team of 3 computer vision researchers and 2 data engineers, developing a CNN-based deep learning object detector with high accuracy through advanced temporal and spatial features.
- Directed research initiatives on image processing techniques to improve data robustness and accuracy, while implementing multiprocessing pipelines that optimized performance for real-time operation.
- Spearheaded implementation of a complete CI/CD automation process with automated testing, ensuring consistent system quality throughout the development lifecycle.

Full Stack Developer

IDF, Ground Forces

May 2019 – Apr 2020

- Developed and deployed a web application utilizing React, Node.js and C++.

Product Manager

IDF, Ground Forces

Oct 2015 – May 2019

- Managed full product development lifecycles for hardware and software applications.

EDUCATION

M.Sc. Computer Science

Bar-Ilan University

Oct 2018 – Jan 2023

- **Deep Learning Based DNA Separation.** Addressed DNA mixtures using CNNs and clustering techniques to learn and cluster latent representations of genomic data.
- Advisors: Prof. Noam Shomron, Prof. Yoram Louzoun

B.Sc. Computer Science and Mathematics

Ariel University

Oct 2012 – Oct 2015

TECHNICAL SKILLS

Languages	: Python, JavaScript, C#, Shell, CSS, HTML, C++
Frameworks	: React.js, Node.js, Flask
Libraries	: PyTorch, PyTorch-Lightning, SciKit-Learn, Hugging Face, OpenCV, Pandas, Hydra, gRPC
Dev Tools	: Git, Gitlab-CI/CD, Azure, Docker, GCP, OpenShift