Etai Wigman

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Computer Vision and Algorithm Engineer with a B.Sc. in Electrical & Computer Engineering from Ben-Gurion University. Strong foundations in algorithm design, machine learning, and computer vision, with hands-on experience developing real-time vision systems and end-to-end ML pipelines in Python. Experienced in combining classical image processing, feature engineering, and data-driven models, with a solid background in signal processing supporting algorithmic development. Fast learner, proactive problem-solver, and team player.

Education

Ben-Gurion University of the Negev — *B.Sc. Electrical & Computer Engineering*, GPA: 81 | 2019–2024

- Specializations: Signal Processing, Algorithms, Machine Learning.
- Relevant Coursework: Digital Image Processing, Machine Learning, Estimation Theory, Optimization, Algorithm Design.

Projects

Face Mask Detection – Computer Vision ML System

- Implemented an end-to-end image classification pipeline using PyTorch, including preprocessing, training, evaluation, and real-time inference.
- Designed modular data pipelines and evaluation routines to support systematic experimentation and reproducibility.
- Integrated the trained model with OpenCV for live webcam inference under varying input conditions.

Parkinson's Disease Detection – Deep Learning & Algorithmic Signal Analysis

- Built an algorithmic pipeline combining feature extraction and supervised ML for time-series classification.
- Applied signal-processing techniques and mathematical feature engineering to physiological data.
- Ensured reproducibility and stability through controlled experimentation, documentation, and evaluation.

Snowboard Visual Simulator – Real-Time Vision System

- Collaborated in a 4-member team to develop a real-time gesture recognition system using Python and OpenCV, focusing on spatial feature extraction and pipeline stability.
- Designed efficient image-processing modules and debugged runtime behavior to maintain stable real-time execution.
- Profiled and refined the vision pipeline to improve robustness and responsiveness under noisy input conditions.

Work Experience

KLA (formerly Orbotech) — *IT Support & Systems Upgrade* | 2018–2019

- Assisted in modernizing computing infrastructure, coordinating upgrades across departments.
- Diagnosed and resolved system compatibility issues, improving reliability and productivity.
- Collaborated with cross-functional teams, gaining experience in troubleshooting and optimization.

Military Service

IDF – Communication Corps — *Computer Network Administrator* | 2014–2017

- Managed and maintained over 500 computers and associated networks.
- Trained and guided team members, improving operational readiness.
- Awarded Base Commander's Excellence Award for outstanding service.

Technical Skills

Programming & Tools: Python, C/C++, PyTorch, TensorFlow, OpenCV, NumPy, Pandas, Git, MATLAB, Linux
Domains: Computer Vision, Algorithm Design, Image Processing, Deep Learning, DSP, Real-Time Systems
Soft Skills: Problem Solving, Analytical Thinking, Proactive Attitude, Team Collaboration, Independent Learning

Languages

Hebrew – Native | English – Full Professional Proficiency