CURRICULUM VITAE

Asif Bayer

Algorithm Developer & Builder

Specialized in deep learning and applied AI engineering, with a track record of taking research from paper to production at scale.

Tel Aviv, Israel bayerasif@gmail.com linkedin.com/in/asif-bayer

SKILLS

Machine Learning

- PyTorch & TensorFlow
- NumPy & Pandas
- Object Detection
- Vision Transformers (ViT)
- LLMs & VLMs

Engineering

- Python
- C++
- Cloud Infrastructure
- Scalable Neural Network Training
- Statistical Validation

Product & Design

- Full-Stack Development
- Synthetic Media Pipelines
- Photoshop
- Blender
- Video Motion Graphics

EDUCATION

B.Sc. Computer Science

Hebrew University of Jerusalem

2018 — 2021

GPA 92

LANGUAGES

Hebrew — native

English — fluent

Chinese — intermediate

EXPERIENCE

Algorithm Developer Technical Lead

Mobileye 2023 — 2025

- **Technical Scaling:** Scaled an advanced object detection pilot into a major company initiative, architecting core perception workflows for a 15-member cross-functional team.
- **Architectural Vision:** Defined the roadmap for next-generation perception systems—driving the transition to **transformer** paradigms (ViT, Pix2Seq), VLM/LLM integrations, and resulting in multiple co-invented **patents**.
- **Hands-On Execution:** Drove the end-to-end ML lifecycle, developing, optimizing, and deploying complex deep learning models for embedded hardware.

Algorithm Developer

Mobileye 2020 — 2023

- **Core R&D:** Developed real-time object detection algorithms for autonomous vehicles, bridging state-of-the-art academic research with production-grade performance.
- **End-to-End ML:** Owned the full ML lifecycle: data curation, model training, cloud-scale validation, and high-performance C++ deployment.
- **Innovation:** Pioneered initial experiments with transformer-based object detectors, significantly influencing the autonomous driving technical roadmap.

Graphics Engineer

Wochit 2018

- **Python Automation:** Developed Python and SQL backend pipelines, programmatically generating data-driven video graphics to replace manual rendering.
- **Internal Tooling:** Built custom internal tools, streamlining creative operations into standardized, programmatic workflows.

Intelligence Analyst

IDF — Intelligence Tech Research Division 2014 — 2017

- **Strategic Analysis:** Conducted deep-dive technological research to inform high-stakes decision-making for senior officials.
- **Communication:** Synthesized complex data into concise, actionable intelligence reports under rigorous timelines.