

Vladyslav Hamolia

Staff AI Engineer

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With 9+ years of experience in applied AI, machine learning, and data-driven product development, I currently serve as a Staff AI Engineer at MacPaw. My work focuses on building ML solutions for macOS and iOS products, including on-device AI, NLP, computer vision, and predictive modeling. I also contribute to defense technology projects, applying AI/ML methods to computer vision, sensor data analysis, and audio recognition tasks.

EXPERIENCE

MacPaw

Staff AI Engineer

Dec 2025 – now

AI Product Lead / Lead Data Scientist

Oct 2024 – Dec 2025

Senior Data Scientist

Aug 2020 – Sep 2024

Advanced AI/ML solutions for products used by millions of iOS and macOS users: defining ML strategy, leading applied R&D, and developing production-ready machine learning systems across NLP, computer vision, predictive modeling, and privacy-preserving AI.

- **Computer Vision:** semantic segmentation, object detection on photos and videos, image classification, and image reconstruction/enhancement (image inpainting).
- **NLP:** text classification, metric learning, information extraction and processing, Multi-Agent systems design, RAG pipeline development, and LLM fine-tuning.
- **Predictive Modeling:** forecasting customer lifetime value (LTV) and customer churn.
- **Federated Learning:** training neural networks for computer vision directly on user devices, improving models while preserving data privacy.

State Scientific and Research Institute of Cybersecurity Technologies and Information Protection

Machine Learning / AI Specialist

Sep 2024 – Present

Applied AI/ML projects in the defense technology domain, with most details subject to NDA. Work focuses on computer vision, structured data analysis, trajectory prediction, and audio recognition for military-related use cases.

- **Computer Vision:** detection and recognition of aerial objects, including UAVs and FPV drones.
- **Trajectory Prediction:** analysis of structured sensor data to predict aerial object movement.
- **Audio Recognition:** classification of military-related sound sources.
- **Synthetic Data Generation:** creation of synthetic datasets to support model training and evaluation.

Kyiv School of Economics

Academic Director of

Artificial Intelligence

May 2023 – Feb 2024

Created and launched a Bachelor's program in Artificial Intelligence aligned with modern industry standards, emerging AI trends, and labor market needs. Designed a curriculum combining theoretical foundations with practical AI engineering skills. The program currently has 140 students. I also support collaboration between MacPaw and KSE to strengthen industry-academia connections in the technology sector.

FairmarkIt

Senior Data Scientist / Team Lead

Oct 2019 – Mar 2021

Led development of a comprehensive search solution for platform efficiency in the Supply Chain sector, heading a team of Data Scientists and ML Engineers. Developed a multilingual semantic search algorithm to optimize search across various languages.

- Deep learning-based search engine with Learning-To-Rank functionality.
- Domain-specific hierarchical text classification with custom BERT-based models.
- ML infrastructure on AWS; scalability and reliability through best-practice adoption.

Eleks

Data Scientist
Sep 2018 – Sep 2020

- Designed and developed data science solutions for a diverse range of clients across multiple industries.
- **Embedded Systems:** optimized neural networks for resource-constrained devices via quantization, pruning, and inference acceleration; built an internal CV framework similar to ONNX.
 - **Security:** robust object tracking for video surveillance using SORT, DeepSORT, and YOLO-based detectors.
 - **Healthcare:** semantic segmentation for medical image analysis with U-Net and FCN architectures, supporting clinical decision-making.

SoftServe

Python Software Engineer
Feb 2016 – Sep 2018

- Developed and enhanced a large-scale American e-commerce project, from software design to integrating machine learning technologies.
- Robust web-scraping systems with asynchronous data retrieval and optimized data pipelines.
 - **Python best practices:** modular design, unit testing, continuous integration.
 - NLP models automating text data processing, integrated into the existing project ecosystem.

EDUCATION

National University "Lviv Polytechnic", Faculty of Cybersecurity
Bachelor's Degree (2013 – 2017)
Master's Degree (2017 – 2019)
Doctoral Studies (2019 – 2023, unfinished)

TOOLS

ML Stack
numpy, scipy, OpenCV, pandas, gensim, nltk, Keras, TensorFlow, PyTorch, CoreML

Cloud
AWS, Google Cloud

Databases
MongoDB, PostgreSQL, ElasticSearch, MemsqI

OS
Linux, macOS