

Volodymyr Halian

AI & Machine Learning Developer

Linz, Austria | Focus: Machine Learning Engineering

PROFILE

Artificial Intelligence student at Johannes Kepler University Linz, focused on machine learning, deep learning, and practical software development. Academic interests include PyTorch, neural network architectures, optimization, and careful model evaluation. Seeking an internship or working-student opportunity.

EDUCATION

Johannes Kepler University Linz

Bachelor's Program in Artificial Intelligence | In Progress | Linz, Austria

Relevant fields: machine learning, deep learning, probability and statistics, linear algebra, optimization, reinforcement learning, algorithms, and software engineering.

TECHNICAL TOOLKIT

- Python, PyTorch, NumPy, Pandas, Matplotlib, scikit-learn
- Coursework: FNN, CNN, backpropagation, gradient descent, model evaluation
- Foundations: linear algebra, calculus, probability, statistics, optimization

ACADEMIC STUDIES & EXPLORATIONS

FNN vs CNN

Exploring how architectural inductive biases shape learning on a sequence-based latch task.

Inside the training loop

Connecting neurons, gradients, and parameter updates to the mechanics of learning.

Seeing data differently

From high-dimensional features to interpretable projections with principal component analysis.

Finding structure without labels

Investigating hierarchical clustering, distance metrics, and the structure hidden in unlabeled data.

PRACTICAL ENGINEERING & BUSINESS PROJECTS

Mousse Bakery - digital projects, AI-assisted workflows & operations

Website-related development, product catalogs, customer communication, business-rule validation, wholesale coordination, and workflow design. Live business website: moussebakery.com

Mobile calendar application - prototype

React Native / Expo exploration of a weekly calendar and task-entry interface. Voice entry and schedule-photo extraction remain experimental goals.

RESEARCH INTERESTS

Causal vs Full Attention - upcoming seminar and practical work at JKU Linz.

JEPA and world models - research interest; no completed implementation claimed.