Dominik Papaj

+48 698 568 848 | dominik.papaj200466@gmail.com

LinkedIn: dominikpapaj | GitHub: Dominik16786 | Website: Dominik16786.github.io

Summary

Computer Physics student at AGH University with hands-on experience in Python, data analysis, machine learning, and LLM-based systems. Co-author of a paper on LLM-guided evolutionary optimization (GECCO 2025). Seeking an internship or junior IT role where I can apply analytical thinking and software development skills.

Skills

Programming: Python, Java, C/C++
Data & ML: NumPy, pandas, scikit-learn, PyTorch, LLMs, evolutionary algorithms
Web & Backend: Django, HTML, CSS, SQL
Tools: Git, Linux, Docker, LaTeX, CapCut
Other: Simulation, numerical methods, data visualization

Experience

Digital Content Creator / Social Media Manager — Freelance   2025–Present
- Created and optimized short-form promotional content using performance analytics to improve engagement.
- Managed social media accounts and collaborated with business owners to align content with brand goals.

Physics & Mathematics Tutor — Freelance   2024–Present
- Delivered one-on-one tutoring for primary and secondary students in physics and mathematics.
- Adapted teaching methods to individual learning styles, improving student comprehension.

Online Store Owner — Vinted   2023–Present
- Managed product listings, pricing, order processing, and customer communication.
- Maintained high customer satisfaction through timely fulfillment and support.

Projects

DEuLLM — LLM-Designed Evolutionary Algorithm   GitHub
- Co-developed a Differential Evolution variant guided by LLM prompts.
- Implemented experiment pipeline in Python and evaluated benchmark functions; co-authored paper accepted to GECCO 2025 (ACM Digital Library).

Green Areas Analysis — Busko, Kraków   GitHub
- Analyzed and visualized urban green spaces using Python, Pandas, and geospatial libraries.
- Produced actionable insights and interactive maps for city planning decisions.

Divorce Prediction AI Support System — Ongoing
- Developed a Django web application that predicts divorce risk from a 54-question survey using ML models (Random Forest, Logistic Regression) and identifies top contributing factors.
- Integrated an AI chatbot (Ollama) to generate personalized step-by-step action plans; provided role-based access, interactive statistics.

Education

AGH University of Science and Technology, Kraków
Bachelor of Science in Computer Physics (English-taught)   (2023–2027)

Certifications

Python Programming Fundamentals — Microsoft (2025)
Advanced MySQL Topics — Meta (2025)
Version Control with Git — Meta (2025)