

ELDAR MUKHTAROV

📍 LODZ, POLAND

☎️ +48 516 398 500

✉️ eldar.mukhtarov.tech@gmail.com

👤 PROFILE

Award-winning AI researcher and engineer, recognized as Łódź Programmer of the Year 2024, with experience building machine learning systems for health monitoring and civic applications. Specializes in deep learning for cardiovascular risk prediction using wearable and telemonitoring data. Has architected Python-based solutions for universities, foreign municipalities, and public institutions. Author of a peer-reviewed monograph chapter and speaker at national and international conferences, including TEDx.

🎓 EDUCATION

B.Eng. in Computer Science, Lodz University of Technology GPA: 5.0/5.0

October 2023 – (Expected) March 2027

Researcher at UbiCOMP (AI & IoT focus) | Competitive Programmer & Olympiad Participant

Awards:

- Accenture & Santander Bank Scholarship – Selected for academic and extracurricular excellence.

- TUL Foundation Scholarship (2025) & Rector's Scholarship (2024–2026).

Selected Coursework:

Intro to Machine Learning | Deep Learning | Data Analysis | Reinforcement Learning

B.Sc. in Computer Science, University of Lodz GPA: 4.99/5.0

October 2022 – September 2025

B.Sc. Thesis: *Advanced Acoustic Analysis and Classification of Instrumental Sounds in High-Dimensional Feature Spaces*

Awards:

- Medal for Academic Excellence (Medal za Chlubne Studia) – Highest University Honor.

- Fujitsu, Hexagon, Asseco Data Systems, & Santander Bank Scholarships.

- Rector's & Dean's Awards for significant contributions to Faculty development (2023–2025).

👥 PROFESSIONAL & RESEARCH EXPERIENCE

AI-Driven Cardiovascular Health Monitoring and Risk Assessment

Łódź University of Technology

Commissioned research funded by the Polish Ministry of Science and Higher Education

Program: Supporting students in improving their competences and skills

Supervisor: Prof. Krzysztof Grudzień

Oct 2025 – Sep 2026

- Developing explainable Deep Learning (XAI) models for cardiovascular risk estimation using wearables
- Designing long-term monitoring pipelines for elderly populations to support early detection of high-risk cases
- Integrating model interpretability to support clinical trust and decision-making

ChatTUL: AI Admissions Chatbot at the Lodz University of Technology

Łódź University of Technology

Supervisor: M.Eng. Natalia Walczak

Mar 2025 – May 2026

- Co-developing an RAG-based conversational AI system to automate student admissions and support
- Working on model fine-tuning, evaluation, and response quality analysis
- System contributed to 40% increase in international student applications

Project Lead Apprenticeship – UniGuide UL Mobile App at University of Lodz

Faculty of Mathematics and Computer Science

October 2024 – February 2025

- Led a 4-person agile team to deploy a Kotlin/PostgreSQL navigation app that helps students navigate the university, locate buildings and rooms, and view room schedules
- Managed product roadmap and stakeholder feedback from international exchange students

📖 PUBLICATIONS

Time-Frequency Fourier Methods for Live Audio Noise Reduction

Eldar Mukhtarov

In *Matematyka – od zastosowań oczywistych do zdumiewających* – MathUp 2025,

Łódź University of Technology, 2025.

Monograph chapter. ISBN: 978-83-938538-5-4.

◦ LINKS ◦

[My Website](#)

[LinkedIn](#)

[GitHub](#)

[Eolymp](#)

◦ HARD SKILLS ◦

Languages

- Python
- C++

Machine Learning

- Pytorch
- Tensorflow
- Scikit-learn

Data

- Numpy
- Pandas
- SQL

(PostgreSQL)

Systems

- Docker
- Linux
- Git/Github

◦ HOBBIES ◦

Solving Rubik's cube

Entrepreneurship

3D modeling and printing

◦ LANGUAGES ◦

Azerbaijani (Native)

Turkish (Native)

English (C1)

German (B1)



SELECTED TALKS

5th International Congress Digital Regeneration of Cities – “Why AI Alone Can’t Yet Cure Cardiovascular Disease and What We’re Doing about It in Łódź”

April 2025

- Explained how locally trained, explainable AI models using wearable and telemonitoring data can support early cardiovascular risk detection and ease clinical workloads in aging urban populations.
- Presented at the same congress as Poland’s Minister of Digital Affairs.
- Networked with executives from Comarch, IQVIA, and other AI and healthcare experts.

TEDx Copernicus College Youth Conference – “[Playing with AI and Creativity in Game Development](#)”

January 2024

- Presented the interplay between human creativity and AI in game development.
- Showcased a self-made game created using AI that proves the potential synergy between humans and AI.



LEADERSHIP & COMMUNITY

Founder & President | Faculty Chess Club (University of Lodz)

Founded the club and organized university-wide tournaments (e.g., "Juwenalia Chess Tournament"), managing logistics and promotion achievements.

Student Mentor | Lodz University of Technology

Mentored incoming and first-year students, assisting with academic adaptation and navigating university life.

ECIU Student Ambassador | European Consortium of Innovative Universities

Represented the university in international initiatives and promoted student mobility opportunities.



GLOBAL MOBILITY & COMPETITIVE ACHIEVEMENTS

1st Place Winner, Circular Week Student Competition

November 2025

- Co-authored a "Circular Data Center (CDC)" strategy to reduce electronic waste and optimize energy consumption.
- Selected to present the winning solution at the **European Sustainability Congress**, discussing sustainable IT infrastructure with industry leaders.

International Academic Mobility (9 Short-Term Programs)

Sweden, Norway, Ireland, Netherlands, Germany, Portugal, Italy

- Gained specialized expertise ranging from Medical Diagnostics (Sweden) and Anti-corruption (Ireland) to Intercultural Competences (Netherlands), successfully leading projects in multicultural, agile teams.
- Selected for diverse short-term exchanges focusing on interdisciplinary adaptability.

2x Participant, Polish Academic Championship in Team Programming

(AMPPZ 2024, 2025)

- Represented the university in solving complex algorithmic optimization problems (C++) under time constraints.

EducationUSA Academy Connects | Diablo Valley College, California, USA (Virtual)

July 2021 – August 2021

- Completed advanced technical training and networked with Silicon Valley professionals (including Twitter/X engineers).
- Collaborated with a global cohort on technical projects, developing early cross-cultural communication skills.