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#### **EDUCATION**

#### Universität Hildesheim

**Master in Data Analytics** Oct 2021 - Oct 2023

## **Technical University of Moldova**

**Bachelor in Software Engineering** Sep 2018 - June 2021

## **LANGUAGES**

- English (C2)
- German (B2)
- Russian (C1)
- Romanian (native)

## **SOFT SKILLS**

- Quick learner
- Problem solver
- Effective communicator
- · Team player
- Adaptable to new environments
- Innovative thinker
- Critical thinking
- Time management

## PROFESSIONAL EXPERIENCE

## **Machine Learning Engineer - AIDY Health**

May 2024-present

Engineered innovative healthcare applications using Generative Al, including training of custom LLMs and SLMs. Demonstrated expertise in Neural Networks, Prompt Engineering and more.

# **Working Student - Web Developer - Hildesheim Universitat**

June 2022 - September 2023

Implemented the Cu2RVE project website - full-stack - using technologies like FastAPI and Vue.js. Collaborated in an Agile environment and ensured efficient delivery of project milestones.

## **Teaching Assistant - Technical University of Moldova**

September 2021 - December 2023

Instructed more than 100 students in seminars and laboratory sessions for the Fundamentals of Artificial Intelligence course.

## **Machine Learning Engineer - Billheap**

July 2020 - October 2021

Developed an AI-based platform for invoice data extraction using advanced machine learning algorithms for information retrieval, NLP, OCR, and image recognition. Built and deployed a web platform with backend and frontend components, integrating Docker, and improved the UI for clear data insights and statistics.

#### **Junior Web Developer - UPDIVISION**

April 2017 - October 2021

Created full-stack websites for clients in various industries, handling both frontend and backend development.

## **TECHNICAL EXPERTISE**

- Machine Learning, Al
- GenerativeAl
- Deep Learning
- Data visualisation
- LLMs. SLMs
- Prompt Engineering
- Computer Vision
- Reinforcement Learning
- Explainable Al
- Keras, Tensorflow
- PyTorch
- HuggingFace
- Matplotlib, pandas

- Python
- JavaScript
- C,
- C++
- R
- FastAPI, Flask
- MongoDB
- SQL
- HTML, CSS, Bootstrap
- Vue.js
- Golang
- Docker
- Github

### **PROJECTS**

### Optimizing TSP solutions with subgraph decomposition and Reinforcement Learning

January 2022 - September 2023

Developed a hybrid algorithm for solving the Travelling Salesman Problem with Reinforcement Learning and unsupervised methods, able to scale to up to 1.9 million nodes TSP

### **Multivariate Probabilistic Time Series Forecasting for Energy Consumption**

February 2022 - June 2023

In a team of 5 people, we developed the model "TransformerGrad", based on Deep Learning models such as TimeGrad, Autoformer, RNN, Generative models, N-HiTS, etc. for energy consumption prediction (as part of the Master's degree at Universität Hildesheim)

## Al system for recommending similar posts about lost and found pets

September 2020 - June 2021

Project developed as part of my bachelor thesis, and it was applied to match similar posts about lost and found pets. It used CNNs for image similarity and a NLP techniques for text similarity.

#### System for recognizing data from ID cards

Spring 2021

Developed a system for extracting essential information from ID cards using OCR models and advanced image processing techniques.

explore more projects on Github: https://github.com/mdiannna

## **AWARDS**

# "Sympathy of the Public" award in "Best Student Project in Science and Innovation" competition (European Researchers' Night)

November 2020, Moldova

#### \$600 prize at JSHacks - the AI edition hackathon

May 2018, Romania

#### 2nd Place at Textract Hackathon organised by Sparktech Romania

December 2018, Romania

# Technovation Challenge Semifinalist - 1st place in National Competition, Moldova Visitor Team to the final competition, USA

November 2020, Moldova

# Intel International Science and Engineering Fair (ISEF) Special Award - Open Source Award from GoDaddy

May 2016, USA

#### Intel International Science and Engineering Fair (ISEF) Grand Award 4th Place

May 2015, USA

#### PUBLIC SPEAKING AND VOLUNTEERING

## Operational Support Team Member at "Artificial Intelligence in Action", Moldova

July 2019 - present

Contributed to the establishment and growth of Moldova's first Artificial Intelligence community.

#### **Trainer at the GirlsGoIT program, Moldova**

June 2017 - September 2021

Educated more than 100 young women about Data Science, Web Development and Robotics.

#### Speaker at TEDx RoseValleyParkED, Moldova

February 2021

Delivered a speech about various field of AI, diverse applications and innovative initiatives in Moldova.