



Andrei-Damian Dinescu

AI/ML Engineer | PhD Student in Systems Engineering

Summary

AI/ML engineer at Siemens Healthineers and PhD student in Systems Engineering at Transilvania University of Braşov, researching multimodal large language models and their reliable use in medical and other expert domains. Experience building LLM-based systems for large volumes of unstructured documents, contributing to EU-funded NLP research and developing deep learning methods for medical imaging (IEEE ETFA 2023).

Experience

Siemens Healthineers

Oct 2026 – Present

AI/ML Engineer

Braşov, Romania (Remote)

- Joined as part of the department's transition from Siemens AG, after several years of collaboration between the teams.
- Developing LLM-based systems for processing and analyzing unstructured data.

Transilvania University of Braşov

Jul 2026 – Present

Research Assistant

Braşov, Romania

- Research assistant in **NeuRoX**, the national project establishing the Romanian Center of Excellence in Clinical Neurosciences, in which the university is a partner.

Siemens AG

Aug 2023 – Oct 2026

Machine Learning Engineer

Braşov, Romania (Remote)

- Developed LLM-based systems for information extraction and analysis over large document collections, combining OCR, vision-language models and retrieval-augmented generation.
- Designed pipelines in which model output is reviewed and confirmed by domain experts before use.
- Led the technical implementation of a project from requirements to deployment, working with a small development team and the client.
- Contributed to DT4H, an EU-funded research project, on named entity recognition and language model training.
- Earlier: developed object detection models for remote sensing platforms.

Siemens AG

Jul 2022 – Aug 2023

Artificial Intelligence Intern

Braşov, Romania

- Researched deep learning methods for quality enhancement of X-ray coronary angiograms (noise reduction, contrast enhancement, deblurring).
- Work published at IEEE ETFA 2023 and used for the bachelor thesis (AFCO 2023 Grand Prize).

Endava

Aug 2022 – Nov 2022

Software Engineering Apprentice

Braşov, Romania

- DevOps role in an Agile team building a smart parking app: Azure infrastructure with Terraform and CI/CD with GitHub Actions.

Education

Transilvania University of Braşov

2025 – 2029

PhD, Systems Engineering

Research topic: multimodal large language models for medical decision support.

Transilvania University of Braşov

2023 – 2025

Master's degree, Computer Science

Transilvania University of Braşov

2020 – 2023

Bachelor's degree, Applied Informatics

- Thesis on deep learning for coronary angiography image enhancement, developed with Siemens R&D.

- Additional courses on AI in medical imaging (Siemens R&D) and deep learning (Xperi); tutor for first-year Data Structures.

Publications

XCAE: Deep Neural Network for X-ray Coronary Angiograms Quality Enhancement. IEEE International Conference on Emerging Technologies and Factory Automation (ETFA), 2023.

Skills

AI/ML: Large Language Models, Multimodal Learning, Vision-Language Models, Retrieval-Augmented Generation, AI Agents, Natural Language Processing, Named Entity Recognition, Computer Vision, Object Detection, Medical Imaging, Deep Learning, Transformers

Tools: Python, PyTorch, Microsoft Azure, Git, Terraform, GitHub Actions

Languages: English (full professional proficiency), Romanian (native)

Honors and Awards

- **AFCO 2023 Grand Prize**, Transilvania University of Braşov: one of three grand prizes among 316 participants, for the bachelor thesis on coronary angiography image enhancement.
- **Best TECH4GOOD Group Project, Romania & Moldova**, Huawei Seeds for the Future 2022: IoT home care system for elderly people living alone.

Certifications

- Psychopedagogical Module, Level I & II (2025-2027), Transilvania University of Braşov
- McKinsey.org Forward Program, McKinsey & Company, 2025