Boiciuc Tyby-Dany

AI & LLM Enthusiast in 🕠

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PROFILE

Self-motivated Computer Science student (3rd year) with a strong interest in machine learning, LLMs, and real-world AI applications. Proactive problem-solver and self-learner, constantly exploring improvements, tutorials and new tools to enhance my AI skills. Currently focused on self-studying the Transfomer architecture behind Large Language Models. Actively researching techniques like Retrieval-Augmented Generation (RAG) to enable models to reason over domain-specific, dynamic data. I'm actively seeking an internship to contribute hands-on to a real-world AI team.

SKILLS

- **Programming:** Python (Scikit-learn, TensorFlow, PyTorch), C#, Java, C++, C, SQL, JavaScript (React, Node.js, Express.js), Bash, Solidity
- AI/LLM: Neural Networks, Transformer architecture, RAGs, Embeddings Fine-Tuning, Prompt Engineering for LLM, HuggingFace Transformers

EXPERIENCE

Machine Learning - Summer Practice

 $new Pharma\ Development - summer\ 2025$

- Independently developed an end-to-end ML pipeline for customer segmentation in pharmaceutical retail, experimenting extensively with NLP and unsupervised learning to derive insights from product and sales data.
- Built a robust preprocessing pipeline with Pandas, testing multiple techniques to clean unstructured datasets, ensuring high-quality inputs.
- Explored diverse NLP models, applying Sentence Transformers and experimenting with BioClinicalBERT and Masked Language Modeling to generate optimized semantic embeddings for pharmaceutical product descriptions.
- Designed a two-stage clustering system, testing K-Means, and PCA configurations, iteratively optimizing product and customer segments using Silhouette Score for actionable outcomes.

PERSONAL PROJECTS

E-Commerce Purchase Prediction AI

DataCamp AI Engineer Certification Project

- Built and deployed a neural network from scratch using PyTorch that predicts customer purchase probability with business-optimized preprocessing
- Gained hands-on experience applying advanced AI techniques in a real-world setting, demonstrating ability to build end-to-end ML workflows aligned with business objectives

Continuous Learning Projects

AI-LLM-RAG

- Continuously expanding knowledge through tutorials and self-study on advanced DL concepts.
- Studied the mathematical foundations of neural networks (linear algebra, calculus, optimization) and understood how partial derivatives and backpropagation update weights and biases to minimize the loss function.
- Built mini PyTorch experiments to connect theory with practice

CERTIFICATIONS

AI Engineer for Data Science

Issued by DataCamp, 2025

Certified ability to design neural networks with PyTorch, implement MLOps pipelines, and deploy LLM solutions (Llama 3, Hugging Face) for real-world applications



EDUCATION

West University of Timisoara, Romania Bachelor's Degree in Computer Science – 3rd Year Student