Malina Molnar

Data Scientist

✉ molnar.malina99@gmail.com   📞 +40753344316   🏠 malinery.com

EXPERIENCE

JUNIOR DATA SCIENTIST | ROBERT BOSCH GMBH
July 2021 – Present | Cluj-Napoca, Romania

- → Currently working on detecting anomalies in time series from fleet vehicles
- → Developed a semi-supervised Autoencoder that works with a partially annotated dataset (only a subset of the dataset is labelled as anomaly/healthy)
- → Other used networks: Transformer-style architecture with multi-head attention
- → First completed project was based on a neural architecture that recreates video sequences given their first and last image frame.
- → The video reconstruction was based on the "Learning to synthesize motion blur" paper and used an autoencoder architecture combined with a custom-written Keras layer.

UNDERGRADUATE SCHOLARSHIP FELLOW | ROBERT BOSCH GMBH
October 2020 – June 2021 | Cluj-Napoca, Romania

- → Researched the use of PCA to decompose MNIST images and generate new image permutations from the main components.
- → Assessed the performance improvement in comparison with a vanilla generative adversarial network, implemented by hand to broaden my knowledge.
- → Experimented with image blurring and unblurring using CycleGAN architecture.

BUSINESS INTELLIGENCE INTERN | MHP CONSULTING
July 2020 – September 2020 | Cluj-Napoca, Romania

- → Built a data dashboard used to track business trips and expenses for 200+ employees.
- → Dashboard frontend was built with SAP Lumira, backed by SAP Hana for database queries.

MACHINE LEARNING RESEARCHER | ROMANIAN INSTITUTE OF SCIENCE AND TECHNOLOGY
April 2020 – June 2020 | Cluj-Napoca, Romania

- → Researched the impact of noise initialisation and weight pruning on the performance of neural networks.
- → The projected represented novel research based on the "The Lottery Ticket Hypothesis" paper and was carried out under a senior researcher.

DATA ENGINEERING INTERN | NEUROSCIENCE CHAIR OF BABEȘ-BOLYAI UNIVERSITY
October 2020 - March 2021 | Cluj-Napoca, Romania

- → Improved MATLAB data processing pipelines for fNIRS data
- → Learned the basics of data acquisition and empirical psychology concepts under the supervision of a senior researcher

HACKATON PARTICIPANT | IBM ROMANIA
May 2020

- → Placed 4th out of 103 participants in a national hackaton.
- → Built a cloud-based social network that allowed participants to exchange books.

SKILLS

Python • Tensorflow • PyTorch • Data Science • PySpark • Azure Cloud • MATLAB • SQL • Hadoop • Jupyter Notebook• GANs • Neural Networks • Autoencoders • Deep Learning • Transformers

EDUCATION

BABEȘ-BOLYAI UNIVERSITY
MSc. Software Engineering
October 2021 - June 2023 | Cluj-Napoca, Romania

TECHNICAL UNIVERSITY OF DORTMUND
Erasmus Student
October 2019 - Feb 2020 | Dortmund, Germany

BABEȘ-BOLYAI UNIVERSITY
BSc. Computer Science
October 2018 - June 2021 | Cluj-Napoca, Romania
• Bachelor Thesis: Spike Train Distances

COURSES

Applied Quantum Computing, Amsterdam University of Applied Sciences
July 2022

Machine Learning with Python, Technical University of Berlin
August 2019

LANGUAGES

Romanian, Mother Language

English, Advanced
Certificate in Advanced English C2

German, Advanced
Deutsches Sprachdiplom Stufe II C1