

# about

Highly interested in Machine
Learning and Neuroscience.
Experienced with algorithms and
data structures and a big fan of
competitive programming.

# skills

Pytorch, Tensorflow
Python, C
C++, C#, Java
Haskell, Scala
MATLAB, OpenCV

# acomplishments

- Qualified to the ACM-ICPC
   Southeastern European Regional
   Contest as a 1st year student.
- Finalist in a National Olympiad every year since 6th grade (mathematics, physics and informatics), obtaining medals and awards.
- Won multiple college level contests and hackathons.

## links

- github.com/ArmandNM
- hackerrank.com/ArmandNM
- codeforces.com/profile/ArmandNM
- <u>armandnicolicioiu.github.io</u>

# **Armand Nicolicioiu**

AI ENTHUSIAST +40746900388 armand.nicolicioiu@gmail.com

### education



#### Master in Artificial Intelligence

University of Bucharest (October 2020 - July 2022 expected)

• In depth study of AI: Machine Learning, Computer Vision, NLP.



#### **Bachelor in Computer Science and Engineering**

Politehnica University of Bucharest (2015 - 2020)

• <u>Final thesis</u>: **Research** in **meta-learning** and **few-shot** classification using **Graph Neural Networks** and **Attention** mechanisms.

# work experience



#### Machine Learning Researcher

dotLumen, Cluj-Napoca, Romania (October 2020 - November 2021)

- Building a headset that helps blind persons be more independant.
- Multi-modal environment understanding using Computer Vision.



#### **Software Engineering Intern**

Microsoft, Redmond, WA, USA (July 2019 - September 2019)

- Designed and built a fast generic trending system for large scale data.
- Microservices pipeline for ingestion, processing, storing and retrieval.



#### Software Engineering Intern

Microsoft, Redmond, WA, USA (July 2018 - September 2018)

• Improved Azure's **real-time telemetry** monitoring system by generating **recommendations** that lead to a **faster resolution of alerts**.



#### Machine Learning and Computer Vision Junior Researcher

arnia Arnia Software, Bucharest (January 2017 - November 2017)

- Developed algorithms for improving the HDR camera mode of LG phones.
- Researched generic object segmentation and color perception.



#### **Machine Learning Engineer Intern**

Sparktech Software, Bucharest (July 2016 - October 2016)

• Built a recommender system for a coupon site from scratch.



#### Software Engineer for Social Good - 2 Days Hackathon

Microsoft, Online (Summer 2020 **internship cancelled** due to Covid-19)

• Implemented a **Quiz Bot** that generates questions out of any technical book to **help students** that were forced to become **self-learners**.

## research



#### **Study on Topological Noise Invariant Features**

International Conference on Learning Representations (ICLR 2021)

- Improved the differential geometry and topology libraries Giotto-TDA and Geomstats during the Computational Geometry & Topology Challenge at ICLR.
- Our team won the 1st place and we co-authored the paper summarizing the results.



#### **Epileptic Sleep Study**

<sup>7</sup> Neuroscience Laboratory, "Carol Davila" University Bucharest (July 2020 - Present)

- Building an automatic tool for epileptic seizure detection in mice.
- Analyze EEG & EMG signals and improve the data aquisition process.

# summer schools



#### Eastern European Machine Learning (EEML)

Bucharest (July 2019), Virtual (2020, 2021)

- Attented lectures and practical sessions held by experienced researchers from all across the globe.
- Acted as a volunteer in the preparation and during the school. (2019)
- Presented my research poster on Meta-Learning for Few-Shot Learning.
- Received a Best Poster award (Deep Learning, 2020).



#### **Multi-Agent Systems and Learning Agents**

AI-MAS Laboratory (June 2016)

- Introduction to the fields of multi-agent systems and machine learning.
- I won the contest for the best research idea.

# teaching experience



#### **Undergraduate Teaching Assistant**

Politehnica University of Bucharest (October 2016 - Present)

- TA for: Data Structures and Computer Programming classes.
- I teach laboratory classes and help students solve the exercises.
- Prepare complex assignments for the entire class of 150 students.
- Propose questions for the final exam and help evaluating and grading.

