

# Mihai Dogariu

https://mdogariu.aimultimedlalab.ro/

### WORK EXPERIENCE

02/2014 - CURRENT

**LABORATORY ASSISTANT - UNIVERSITY 'POLITEHNICA' OF BUCHAREST** 

Taught laboratories for several subjects in the Electronics, Telecommunications and Information Technology Faculty (if not specified otherwise):

- · · Computer Programming - 1st year Bachelor
- Object Oriented Programming 2nd year Bachelor
- Data Structures and Algorithms 2nd year Bachelor
- o Microprocessors' Architecture 2nd year Bachelor
- Image Analysis and Processing 2nd year Bachelor (Industrial Engineering and Robotics Faculty)
- Medical Image Processing 3rd year Bachelor (Medical Engineering Faculty)
- Microcontrollers 3rd year Bachelor
- Computer Vision Fundamentals 1st year Masters

Bucharest, Romania

04/2016 - 08/2016

**RESEARCH INTERN - ORANGE LABS NETWORKS** 

Performed a research study on lowering electromagnetic radiation from telecommunication devices.

Châtillon, France

04/2015 - 08/2015

JUNIOR INTEGRATION ENGINEER - ORANGE LABS, PRODUCTS AND SERVICES

Worked on launching the integration platform for TV apps on different servers.

Bucharest, Romania

02/2015 - 03/2015

INVITED RESEARCHER (CHERCHEUR INVITÉ) - LABORATOIRE D'INFORMATIQUE DE GRENOBLE

I participated in a research internship for 6 weeks in collaboration with the GETALP (Groupe d'Étude en Traduction Automatique/Traitement Automatisé des Langues et de la Parole) team, where I conducted a research project in the field of distance automatic speech recognition.

Grenoble, France

12/2013 - 02/2014

**INTERN - VIRTUAL METRIX** 

I was part of the QA team, where I performed testing and mobile applications configuration, with the purpose of reducing the average power consumption.

Bucharest, Romania

06/2013 - 09/2013

**INTERN - ORANGE** 

I was an intern in the "Orange First Step" program, in the IT department.

Bucharest, Romania

#### EDUCATION AND TRAINING

01/10/2016 - CURRENT

PHD - UNSUPERVISED DEEP LEARNING - University 'Politehnica' of Bucharest

Working on my PhD thesis, entitled "Unsupervised Deep Learning" under the coordination of prof. Bogdan IONESCU.

2015 - 2016 - Paris, France

MASTER 2 RECHERCHE - CentraleSupélec, Université Paris Saclay

I followed the "Advanced Wireless Communications Systems" Master's programme and graduated 3<sup>rd</sup> in class.

2014 - 2016

MASTER'S DEGREE - University 'Politehnica' of Bucharest

Graduated the "Multimedia Communications" Master's programme at Faculty of Electronics, Telecommunications and Information Technology.

2010 - 2014

**BACHELOR DEGREE -** University 'Politehnica' of Bucharest

Graduated the "Telecommunications Technologies and Systems" branch of Faculty of Electronics, Telecommunications and Information Technology, taught in English.

### HONOURS AND AWARDS

#### Honours and awards

- graduated 3<sup>rd</sup> out of 23 in Master 2 Recherche with "High honors";
- winner of the competition of the practice internship organized by the "Mihai Draganescu" Artificial Intelligence Research Institute in June August 2013;

#### PUBLICATIONS

**Publications** 

# **Book Chapters**

- 1. B. Ionescu, H. Müller, R. Péteri, D.-T. Dang-Nguyen, L. Zhou, L. Piras, M. Riegler, P. Halvorsen, M.-T. Tran, M. Lux, C. Gurrin, J. Chamberlain, A. Clark, A. Campello, A.G.S. de Herrera, A.B. Abacha, V. Datla, S.A. Hasan, J. Liu, D. Demner-Fushman, O. Pelka, C.M. Friedrich, Y.D. Cid, S. Kozlovski, V. Liauchuk, V. Kovalev, R. Berari, P. Brie, D. Fichou, **M. Dogariu**, L.-D. Ştefan, M.G. Constantin. "Overview of the ImageCLEF 2020: Multimedia Retrieval in Medical, Lifelogging, Nature, and Internet Applications.", in Experimental IR Meets Multilinguality, Multimodality, and Interaction. CLEF 2020. Lecture Notes in Computer Science, vol 12260. Springer, Cham
- 2. B. Ionescu, H. Müller, R. Péteri. D.-T. Dang-Nguyen, L. Zhou, L. Piras, M. Riegler, P. Halvorsen, M.-T. Tran, M. Lux, C. Gurrin, J. Chamberlain, A. Clark, A. Campello, A.G.S. de Herrera, A.B. Abacha, V. Datla, S.A. Hasan, J. Liu, D. Demner-Fushman, O. Pelka, C.M. Friedrich, Y.D. Cid, S. Kozlovski, V. Liauchuk, V. Kovalev, R. Berari, P. Brie, D. Fichou, M. Dogariu, L.-D. Ştefan, M.G. Constantin, "ImageCLEF 2020: Multimedia Retrieval in Lifelogging, Medical, Nature, and Internet Applications", in Springer Lecture Notes in Computer Science, 12036, pp. 533-541, ECIR 2020 Proceedings, 2020.

#### **Conferences**

- 1. **M. Dogariu**, L. Stefan, M. G. Constantin and B. Ionescu, "*Human-Object Interaction: Application to Abandoned Luggage Detection in Video Surveillance Scenarios*", in 13th International Conference on Communications (COMM), Bucharest, Romania, 2020.
- 2. L. Ştefan, Ş. Abdulamit, **M. Dogariu**, M. G. Constantin and B. Ionescu, "Deep Learning-based Person Search with Visual Attention Embedding", in 13th International Conference on Communications (COMM), Bucharest, Romania, 2020.
- 3. A.-M. Tăuţan, **M. Dogariu**, B. Ionescu, "Detection of Epileptic Seizures using Unsupervised Learning Techniques for Feature Extraction", in the 41st Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC). Berlin. 2019.
- 4. **M. Dogariu**, H. Cucu, A. Buzo, D. Burileanu, O. Fratu, "Speech Database Acquisition for Assisted Living Environment Applications", in the Proceedings of the 8th Conference on Speech Technology and Human-Computer Dialogue (SpeD), Bucharest, 2015.
- 5. **M. Dogariu**, H. Cucu, A. Buzo, D. Burileanu, O. Fratu, "Speech Applications in the eWALL Project", in the Proceedings of the 8th Conference on Speech Technology and Human-Computer Dialogue (SpeD), Bucharest, 2015

# **Working Notes**

- 1. **M. Dogariu**, B. Ionescu, "Multimedia Lab @ ImageCLEF 2019 Lifelog Moment Retrieval Task", in CLEF working notes, CEUR, September 9-12, Lugano, Switzerland, 2019.
- 2. **M. Dogariu**, B. Ionescu, "Multimedia Lab @ ImageCLEF 2018 Lifelog Moment Retrieval Task", in CLEF working notes, CEUR, September 10-14, Avignon, France, 2018.
- 3. **M. Dogariu**, B. Ionescu, "A Textual Filtering of HOG-Based Hierarchical Clustering of Lifelog Data", in CLEF working notes, CEUR, September 11-14, Dublin, Ireland, 2017.

# RESEARCH PROJECTS

**Research Projects** 

# **Research Projects**

- 1. 2020 present: *PhD Student* at University Politehnica of Bucharest, in H2020 Al4Media "A European Excellence Centre for Media, Society and Democracy", owner CERTH, Greece, partner University "Politehnica" of Bucharest, axis H2020 ICT-48-2020 / Towards a vibrant European network of Al excellence centres.
- 2. June 2020 present: *PhD Student* at University Politehnica of Bucharest, in the SMARTRetail "Enhancing and Improving Customer Experience and Services in Supermarkets via SMART Artificial Intelligence Powered Systems".
- 3. June 2020 present: *PhD Student* at University Politehnica of Bucharest, in the GRAVI "Virtual Guardian: Artificial Intelligence Powered Multi-Sensor System for Automatic Securing of Areas of Interest".
- 4. April 2020 present: *PhD Student* at University Politehnica of Bucharest, in the Keysight 1 "Machine Learning Techniques for Generating Network Traffic Data" project, owner University "Politehnica" of Bucharest, Research Center CAMPUS, beneficiary Keysight Technologies Romania, ID Keysight 1/23-03-2020.
- 5. April 2020 July 2020: *PhD Student* at University Politehnica of Bucharest, in the Hana 2 "Financial Data Augmentation and Forecasting Using Advanced Al Techniques" project, owner "Politehnica" Research, Development and Innovation Institute, beneficiary Hana Institute of Technology, Republic of Korea, ID Hana 2/01-04-2020.
- 6. May 2017 April 2020: PhD Student at University Politehnica of Bucharest, in the SPIA-VA project ("Intelligent Systems for Video and Audio Analysis Technologies and Innovative Video Systems for Person Re-identification and Analysis of Dissimulated Behavior", project coordinator University Politehnica of Bucharest, ID PN-III-P2-2.1-SOL-2016-02-000.
- 7. July 2019 December 2019: *Research Assistant* at University Politehnica of Bucharest, in the Hana 1 "Machine Learning Techniques for the Processing and Analysis of Financial Data" project, owner "Politehnica" Research, Development and Innovation Institute, beneficiary Hana Institute of Technology, Republic of Korea, ID Hana 1/22-07-2019.
- 8. February 2017 April 2019: *Researcher Trainer* at University Politehnica of Bucharest, in the UMETECH project ("University and Media Technology for Cultural Heritage"), funded by the European Commission.
- 9. January 2017 June 2018: *PhD Student* at University Politehnica of Bucharest, in the SPOTTER project ("Intelligent Real-time Surveilance System with Specific Regions Detection Integrated on IP Cameras"), funded by the Romanian Government through UEFISCDI, project coordinator University Politehnica of Bucharest, ID PN-III-P2-P2.1-PED-2016-1065.
- 10. July 2014 May 2015: *Engineer* at University Politehnica of Bucharest, in the eWALL project("eWALL for Active Long Living"), funded by the European Commission through the 7th Framework Programme, ID FP7-ICT-2013-10, no. 610658.

#### CONFERENCE ORGANIZING COMMITTEES

#### **Conference Organizing Committees**

- 1. 2020: *Technical Support* in the organizing comittee and *Task Organizer* of the ImageCLEF 2020 international evaluation campaign.
- 2. 2019: *Technical Support* in the organizing comittee of the ImageCLEF 2019 international evaluation campaign.
- 3. 2018: *Technical Support* in the organizing comittee of the ImageCLEF 2018 international evaluation campaign.
- 4. 2017: *Member* in the local organizing comittee of the ACM ICMR 2017 ("International Conference on Multimedia Retrieval") international conference.
- 5. 2017: *Technical Support* in the organizing comittee of the ImageCLEF 2017 international evaluation campaign.
- 6. 2013: *Volunteering Student* in the organizing comittee of the ESSCIRC/ESSDERC 2013 ("European Solid-State Circuits Conference/European Solid-State Device Research Conference") international conference.
- 7. 2012: *Volunteering Student* in the organizing comittee of the EUSIPCO 2012 ("European Signal Processing Conference") international conference.

# TECHNICAL PROGRAM COMMITTEE

#### **Reviewer for several publications:**

- 1. ACM Multimedia 2020
- 2. RISS workshop, SpeD 2019
- 3. ACM Multimedia 2019
- 4. MMSP 2019
- 5. INDEED / ICPRAM 2018
- 6. FABULOUS 2017
- 7. UPB Scientific Bulletin

# LANGUAGE SKILLS

Mother tongue(s): ROMANIAN

#### Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C1	C1	C1	C1	C1
GERMAN	A1	A2	A2	A1	A1
FRENCH	A2	A2	A2	A2	A1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

# ORGANISATIONAL SKILLS

#### **Organisational skills**

- very efficient in time management and personal activities organization;
- ability of finding answers for numerous problems in a short time;
- ability to lead through personal example.

# COMMUNICATION AND INTERPERSONAL SKILLS

# **Communication and interpersonal skills**

- good capacity of communication;
- open to innovative ideas and opinions;
- team spirit;
- spontaneous thinking.