europass

Alexandra-Georgiana Andrei

Nationality: Romanian **Date of birth:** **Gender:** Female **Phone:**

Email address: alexandra.andrei@upb.ro **Address:**

EDUCATION & TRAINING

PhD Candidate

Faculty of Electronics, Telecommunications and Information Technology, POLITEHNICA Bucharest [30/09/2021 - Current]

City: Bucharest | **Country:** Romania

Thesis: Intelligence Systems for Diagnosis and Monitoring of Medical Conditions

Master's in Computer Science and Information Technology, Intelligent Systems and Computer Vision

Faculty of Electronics, Telecommunications and Information Technology, POLITEHNICA Bucharest [30/09/2019 - 31/05/2021]

City: București | **Country:** Romania

Final grade: 10 | **Thesis:** Sisteme de Inteligență Artificială pentru detecția maladiei Parkinson

Bachelor's in Applied Sciences, Medical Engineering

Faculty of Medical Engineering, POLITEHNICA Bucharest [30/09/2015 - 31/05/2019]

City: Bucharest | **Country:** Romania

Final grade: 9.83 | **Thesis:** Automatic Detection Systems for Parkinson's Disease

Identification of Parkinson's disease by analysing ground reaction forces during gait.

Training Programme for the Teaching Carrer, 1st Level

National University of Science and Technology Politehnica Bucharest [30/11/2023 - 30/11/2024]

City: Bucharest | **Country:** Romania

Training Programme for the Teaching Carrer, 2st Level

National University of Science and Technology Politehnica Bucharest [30/11/2024 - 30/11/2024]

City: Bucharest | **Country:** Romania

ACADEMIC EXPERIENCE

[28/02/2023 - 30/09/2023]

University Teaching Assistant

National University of Science and Technology Politehnica Bucharest

- *Responsible for the Computer Programming and Programming Languages (Python) laboratory at the Faculty of Medical Engineering.*
- *Responsible for the AI in Biomedical Systems laboratory, Master's in Medical Electronics and Informatics at ETTI, creation of educational materials using Python in Google Colaboratory; supervision of lab sessions and final projects.*

[02/10/2023 - 30/09/2024]

University Teaching Assistant

Applied Electronics and Information Engineering - Faculty of Electronics, Telecommunications and Information Technology, National University of Science and Technology POLITEHNICA Bucharest

RESEARCH EXPERINCE

[10/12/2024 - 25/09/2026]

Scientific Research Assistant

CAMPUS Research Centre, National University of Science and Technology Politehnica Bucharest

[31/08/2021]

Junior Researcher

AI Multimedia Lab, National University of Science and Technology Politehnica Bucharest

Development of artificial intelligence algorithms, annotation and management of databases.

[01/08/2022 - 30/09/2022]

Doctoral Researcher

Junior Fellows Exchange Programme, Swiss Medical Center Techno-Pôle, HES-SO Valais-Wallis, Sierre, Switzerland

Development of algorithms in the field of privacy-preserving AI without sacrificing data utility, through the creation of systems for synthetic visual content generation.

PROJECTS

[Current]

5G-Edge Network for Reinventing Innovation in Community and Higher-Education (5G ENRICH) *Research Assistant*

[Current]

5G Scalable Hubs for Accessible and Resilient Education - [5G-SHARE] *Technical Expert Use Cases*

[Current]

AOSR Generare de Imagini Medicale cu Păstrarea Confidențialității - PrivacyGenMedAI *PhD Candidate*

[09/05/2022 - 31/08/2024]

A European Excellence Centre for Media, and Democracy (AI4Media) *Research Assistant / PhD Candidate*

[01/05/2024 - 21/07/2024]

HARMAN *PhD Candidate*

[09/10/2023 - 31/12/2025]

GNAC2023 ARUT SMART-VLC: Secure and Reliable Transmission in the Visible Light Communication *PhD Candidate*

[11/10/2023 - 10/01/2025]

GNAC2023 ARUT Improving cancer detection in X-rays with the help of generative models *PhD Candidate*

[09/09/2024 - 30/06/2026]

SOL - 2024 - 5 Advanced integrated system for vehicle identification, utilizing multiple recognition/confirmation elements, based on artificial intelligence (AI)" Doctorand - Asistent de cercetare

[09/09/2024 - 29/05/2026]

SOL12/2024 Detecting Relationships between Entities in Unstructured and Structured Data *Research Assistant / PhD Candidate*

[10/10/2024 - 11/08/2026]

SOL 4/2024 DeepDataRomania "Building Collections of Data for Advanced Training of Artificial Intelligence Algorithms in National Security Applications" *Research Assistant / PhD Candidate*

INDUSTRY EXPERIENCE

[31/10/2020 - 31/12/2022]

Quality and Regulatory Consultant

Onera B.V., Eindhoven, Netherlands – REMOTE

[30/11/2019 - 31/12/2022]

Quality and Regulatory Specialist

Evolution MedTec, Bucharest, Romania and citoQualis, Berlin, Germany

[31/05/2019 - 30/11/2019]

Junior Quality Analyst

Sanitasmed Line, Bucharest, Romania

[31/05/2018 - 30/11/2018]

Intern

Digital Telemed Systems, Bucharest, Romania

LANGUAGE SKILLS

Mother tongue(s): Romanian

English

LISTENING: C1 **READING:** C1 **WRITING:** C1
SPOKEN PRODUCTION: C1
SPOKEN INTERACTION: C1

French

LISTENING: A1 **READING:** A2 **WRITING:** A1
SPOKEN PRODUCTION: A1
SPOKEN INTERACTION: A1

CONFERENCES & SEMINARS

[26/06/2024 - 27/06/2024] Thessaloniki, Greece
4th Community Workshop 2024 & AIDA Symposium

[24/07/2023 - 28/07/2023] Ljubljana, Slovenia
Summer School on Artificial Intelligence (EESAI) & Advanced Course of Artificial Intelligence (ACAI)

[10/09/2023 - 15/09/2023] Online
Cambridge Centre for AI in Medicine – AI and Machine Learning in Healthcare Summer School

[24/03/2024 - 28/03/2024] Glasgow, Scotland

European Conference on Information Retrieval 2024 Conference presentation – Advancing Multimedia Retrieval in Medical, Social Media and Content Recommendation Applications with ImageCLEF 2024

[18/09/2023 - 21/09/2023] Thessaloniki, Greece

CLEF 2023: Conference and Labs of the Evaluation Forum *Task organiser for ImageCLEF 2023 benchmarking, first edition of ImageCLEFmedical GANs – "Controlling the Quality of Synthetic Medical Images created via GANs"*

[27/07/2026 - 31/07/2026] Bucharest

ESSIR - European Summer School on Information Retrieval

[09/09/2024 - 12/09/2024] Grenoble, France
CLEF 2024: Conference and Labs of the Evaluation Forum *Chair ImageCLEFmedical GANs Session*

[09/09/2025 - 09/09/2025] Madrid, Spain
CLEF 2025: Conference and Labs of the Evaluation Forum

GRANTURI

[31/01/2023 - 31/05/2024]
Private doctoral scholarship funded by NXP Semiconductors Romania SRL

CERTIFICATIONS

Certified ISO 13485 Auditor, Certificate No. PA/2021/10122

HTML5 Certificate, SC Azimut Vision SRL

3D Printing Certificate in Creo Parametric, ECDL Romania

JOURNAL REVIEWING

ACM transactions on multimedia computing, communications and applications.

Digital health

The imaging science journal

Elsevier Array

Elsevier Computer methods and programs in biomedicine

Elsevier Computers & Electrical Engineering

Elsevier Medical image analysis

Elsevier Neurocomputing

Elsevier Pattern recognition letters

Elsevier Pattern recognition

Springer Scientific Reports

Springer Discover Artificial Intelligence

Springer Discover Oncology

Springer Nature - Arabian journal for science and engineering. Section B, Engineering.

Springer BMC Medical Informatics and Decision Making

Frontiers in Medicine

Frontiers In Aging Neuroscience

Frontiers In Medical Technology

Frontiers In Digital Health

TECHNICAL SKILLS

Image processing

- Expertise in image enhancement techniques, including noise reduction and contrast improvement.
- Knowledge of segmentation methods for extracting meaningful regions from images.
- Experience with algorithms for object detection, recognition, and tracking.

Python

- Experience in feature extraction, classification and analysis of complex datasets, with strong knowledge in Python, deep learning, and artificial intelligence.

Matlab

- Applied for medical signal and image processing; familiarity with toolboxes such as Image Processing and Signal Processing.

C și C++

- Knowledge of object-oriented programming principles and application development using C++.

AutoCAD, Inventor and Creo Parametric

- Knowledge of 2D design and 3D parametric modelling of mechanical components.

VOLUNTEERING

[31/08/2015 - 31/01/2016] Lead Me Volunteer Programme, Alexandru Obregia Clinical Psychiatric Hospital
Volunteer

[30/09/2016 - 31/03/2017] Lindenfeld Association, "Ajungem Mari" Educational Programme
Volunteer

[30/04/2018 - 31/08/2018] Lead Me Volunteer Programme, Alexandru Obregia Clinical Psychiatric Hospital
Volunteer

COMMUNICATION AND INTERPERSONAL SKILLS

Teamwork

Effective collaboration skills in diverse teams.

Analytical thinking

Proven ability to analyse complex problems and generate practical solutions.

Management and Organisation

Project management experience demonstrated through coordination responsibilities at previous positions, including the organisation and coordination of the ImageCLEFmedical GANs competitions.