


Taralunga Dragos

 dragos.taralunga@upb.ro

 <https://scholar.google.ro/citations?user=wSw5KWgAAAAJ&hl=en>

Experience

Associate Professor / Researcher

University POLITEHNICA of Bucharest

Sep 2018 - Present (3 years 11 months +)

Coordinate and facilitate the course and laboratory activities for the following disciplines:

1. Medical Electronics and Informatics (4th year of study, Faculty of Electronics, Telecommunication and Information Technology)
2. Intelligent Systems for Therapy and Rehabilitation (2nd year of study, Medical Electronics and Informatics master program, Faculty of Electronics, Telecommunication and Information Technology)
3. Medical Electronics (1st year of study, Medical Engineering master program, Faculty of Medical Engineering)
4. Medical Equipment for Diagnosis (4th year of study, Faculty of Medical Engineering)
5. Medical Equipment for Therapy and Rehabilitation (4th year of study, Faculty of Medical Engineering)
6. Medical Electronics (4th year of study, Faculty of Engineering in Foreign Languages)

Main responsibilities:

- designing, implementing and updating the course and laboratory materials;
- developing students' professional and transversal specific skills;
- evaluating the laboratory reports, semester projects and final examinations;
- research activities in biomedical engineering domain;
- dissemination of the research results by publishing scientific articles in high impact, WOS, international journals and scientific articles in WOS international conferences proceedings.

Master Program Coordinator

University POLITEHNICA of Bucharest

Sep 2020 - Present (1 year 11 months +)

Coordinator of Medical Electronics and Informatics master program, Faculty of Electronics, Telecommunication and Information Technology.

Main responsibilities:

- defining and implementing the general and specific objectives of the master program;
- defining and implementing the teaching and research plan (the courses and practical applications) in agreement with requirements of the biomedical engineering companies, taking into consideration the professional and transversal skills necessary for the students after graduating;
- creating and coordinating a team of professors and associate professors to achieve the objectives of the master program.

-creating and maintaining a network of industrial partners that can be involved in teaching and research activities.



National research program Expert-Reviewer

Executive Agency for Higher Education, Research, Development and Innovation

Funding - UEFISCDI

Oct 2019 - Mar 2020 (6 months)

Expert-Reviewer for the National Research Competition by Executive Agency for Higher Education, Research, Development and Innovation Funding - UEFISCDI

Main responsibilities:

- evaluation and objective analysis of the submitted projects' proposal, based on scientific experience
- writing synthetic reports based on individual evaluations, applicant's rebuttal and discussion between reviewers



Lecturer-researcher

University POLITEHNICA of Bucharest

Oct 2008 - Sep 2018 (10 years)

Coordination of the course and laboratory activities for the following disciplines:

1. Medical Electronics and Informatics (4th year of study, Faculty of Electronics, Telecommunication and Information Technology)
2. Intelligent Systems for Therapy and Rehabilitation (2nd year of study, Medical Electronics and Informatics master program, Faculty of Electronics, Telecommunication and Information Technology)
3. Medical Electronics (1st year of study, Medical Engineering master program, Faculty of Medical Engineering)
4. Medical Equipment for Diagnosis (4th year of study, Faculty of Medical Engineering)
5. Medical Equipment for Therapy and Rehabilitation (4th year of study, Faculty of Medical Engineering)
6. Medical Electronics (4th year of study, Faculty of Engineering in Foreign Languages)
7. Medical Instrumentation (1st year of study, Medical Electronics and Informatics master program, Faculty of Electronics, Telecommunication and Information Technology)

Main responsibilities:

- designing, implementing and updating the course and laboratory materials;
- developing students' professional and transversal specific skills;
- evaluating the laboratory reports, semester projects and final examinations;
- research activities in biomedical engineering domain;
- dissemination of the research results by publishing scientific articles in high impact, WOS, international journals and scientific articles in WOS international conferences proceedings.



Project Manager

European Space Agency - ESA

Jun 2016 - Apr 2018 (1 year 11 months)

Project director:

Project Manager of The Multi layer Geohazards Information System Concept for Urban Areas (URMA urban risk mapping) funded by the European Space Agency.

Main responsibilities:

- project management activities;

- coordination of the UPB research team and the two partners activities: industrial partner - TerraSigna and National Geological Institute;
- designing and implementing the technical reports for each phase of the project;
- recurrent meetings with the UPB team and the partner teams;
- preparing the deliverables for each project phase;
- recurrent reporting meetings at the European Space Agency headquarters.



Project Manager

University POLITEHNICA of Bucharest

Sep 2016 - Sep 2017 (1 year 1 month)

Project manager of "Driver fatigue monitoring based on heart rate, eye state and facial characteristics the analysis" research project.

Main responsibilities:

- project management activities
- designing and implementing biomedical signal processing algorithms for estimating heart rate and respiration rate.
- designing and implementing biomedical image processing algorithms for estimating face characteristics, heart rate and respiration rate from face images.
- designing and implementing the experimental setup.



Long Term Expert

University POLITEHNICA of Bucharest

May 2014 - Nov 2015 (1 year 7 months)

Main responsibilities:

- counseling students for professional development;
- recurrent one to one meetings with students for identifying their professional skills and offering guidance for choosing a professional career;
- identifying possible employers for graduated students.



Postdoctoral Researcher

University POLITEHNICA of Bucharest

May 2014 - Nov 2015 (1 year 7 months)

Main responsibilities:

- designing and implementing biomedical signal processing algorithms for fetal monitoring
- monthly technical reports;
- publishing 3 research articles published in WOS international journals with impact factor
- publishing 2 research articles in WOS international conferences proceedings



Short Term Expert

University POLITEHNICA of Bucharest

Jan 2013 - May 2013 (5 months)

POS DRU ITEMS, Analysis, Modelling and Simulation Techniques for Imaging, Bioinformatics and Complex Systems, European Structural Funds POS DRU, coordinator Politehnica University Bucharest



Assistant Professor

University POLITEHNICA of Bucharest

Oct 2008 - Oct 2012 (4 years 1 month)

Coordination of the laboratory activities for the following disciplines:

1. Medical Electronics and Informatics (4th year of study, Faculty of Electronics, Telecommunication and Information Technology)
2. Object Oriented Programming (1st year of study, Faculty of Electronics, Telecommunication and Information Technology)
3. Data Bases (3rd year of study, Faculty of Electronics, Telecommunication and Information Technology)
4. Medical Electronics (4th year of study, Faculty of Engineering in Foreign Languages)

Main responsibilities:

- designing, implementing and updating the laboratory materials;
- evaluating the laboratory reports, semester projects;
- research activities in biomedical engineering domain;
- dissemination of the research results by publishing scientific articles in high impact, WOS, international journals and scientific articles in WOS international conferences proceedings.



Invited Researcher

Bundeswehr University Munich

Mar 2010 - Oct 2010 (8 months)

- development of new hardware for recording the fetal ECG from abdominal leads placed on maternal abdomen
- design and implementation of a biomedical signal processing algorithm to extract the fetal electrocardiogram (fECG) signal from the abdominal signals.
- designing and analyzing the behaviour of tripolar concentric ring electrodes for recording the abdominal fECG signal.



Invited Researcher - student

Bundeswehr University Munich

Mar 2008 - Jul 2008 (5 months)

- member of a research team in the domain of biomedical signal processing
- analysis of biomedical abdominal signals.



Invited Researcher - student

Bundeswehr University Munich

Jul 2007 - Sep 2007 (3 months)

- member of a research team in the domain of biomedical signal processing
- analysis of biomedical abdominal signals.



Invited Researcher - student

Bundeswehr University Munich

Jul 2006 - Sep 2006 (3 months)

- member of a research team in the domain of biomedical signal processing
- analysis of biomedical electromyographic signals.

Education



University POLITEHNICA of Bucharest

Doctor of Philosophy - PhD, Biomedical/Medical Engineering

2008 - 2011

Thesis title: Biosignal Processing in Early Life Monitoring: Extraction of the Fetal ECG from Transabdominal Signals



University POLITEHNICA of Bucharest

Master's studies, Business, Management, Marketing, and Related Support Services

2008 - 2010



University POLITEHNICA of Bucharest

5 years engineering studies, Electronics, telecommunication and information technology

2003 - 2008

Five years studies at Faculty of Electronics, Telecommunications and Information Technology

Graduated with an average per five years of study of 10 out of 10

Licenses & Certifications



EU Scholarship - Android Development for Beginners - Udacity



FUNDAMENTALS OF JAVA - Info Acad



"PHP/MySQL PROGRAMMER - InfoAcademy

Skills

Matlab • LaTeX • Biomedical Electronics • Biomedical Instrumentation • Relational Databases • Java
• Microsoft Office • Academic English • C++ • Algorithms

Honors & Awards



Scientific results / scientific article award - Executive Agency for Higher Education, Research, Development and Innovation Funding - UEFISCDI

2015



Scientific results / scientific article award - Executive Agency for Higher Education, Research, Development and Innovation Funding - UEFISCDI

2020