Curriculum Vitae Roxana-Mariana Beiu

PERSONAL INFORMATION

Roxana-Mariana Beiu



Sinaia Str. nr. 3, Arad, 310084, Romania

+40 (734) 189 577

roxana.beiu@uav.ro | rbeiu@yahoo.com

Sex Female | Date of birth 10 November 1968 | Nationality Romanian

WORK EXPERIENCE

01/10/2016 – 30/06/2017 Adjunct Professor (Senior Lecturer level)

"Aurel Vlaicu" University of Arad, Complex M, Str. Elena Dragoi nr. 2-4, 310330 Arad, Romania

Teaching undergraduate courses

Faculty of Food Engineering, Tourism and Environmental Protection

01/03/2017 – 30/02/2019 Assistant Researcher

"Aurel Vlaicu" University of Arad, Complex M, Str. Elena Dragoi nr. 2-4, 310330 Arad, Romania Research Center in Technical and Natural Sciences

01/12/2015 – 31/12/2018 Researcher on Projects:

"Aurel Vlaicu" University of Arad, Complex M, Str. Elena Dragoi nr. 2-4, 310330 Arad, Romania

- Partnership Project: "Optical Coherence Tomography (OCT) systems with handheld and endoscope probes for real time investigations in material studies and for in vivo medical imaging" (http://3om-group-optomechatronics.ro) of the Romanian National Authority for Scientific Research
- Handheld scanning probes with 1D and 2D galvoscanners for biomedical and industrial investigations using Optical Coherence Tomography (OCT). http://3om-group-optomechatronics.ro/ptep181/
- Optomechatronic Choppers with rotational discs and shafts with windows for metrological, biomedical, and laser manufacturing applications. http://3om-group-optomechatronics.ro/bg297/
- Micro-Electro-Mechanical Systems (MEMS)-based handheld scanning probes for distortion-free biomedical imaging with Optical Coherence Tomography (OCT). http://3om-group-optomechatronics.ro/pedp1937/

Faculty of Engineering – Professor's Virgil Duma (3OM Optomechatronics Group)

01/09/2000 - 10/11/2007

PhD Candidate

University "Politehnica" of Bucharest, Romania

Faculty of Engineering and Management of Technological Systems

01/01/2003 - 30/07/2005

PhD Candidate

Washington State University, Pullman, WA, USA

 Took 3 exams, worked on 2 projects, and attended a seminar where I made a presentation on MEMS mirrors

Veterinary and Comparative Anatomy, Pharmacology and Philosophy (VCAPP)

School of Mechanical and Materials Engineering

01/01/2003 - 30/07/2005

Teaching Assistant (TA)

Washington State University, Pullman, WA, USA

Involved in teaching ME220 "Mechanics of Materials – ME 220"

School of Mechanical and Materials Engineering

01/01/2003 - 30/07/2005

Research Assistant (RA)

Washington State University, Pullman, WA, USA

I worked in "David Rector's Lab" on developing new non-invasive brain measurement techniques.
 I was involved in researching dedicated optical systems for measuring nerve bundles swelling triggered by action potential.

Veterinary and Comparative Anatomy, Pharmacology and Philosophy (VCAPP)



Roxana-Mariana Beiu



015/05/1995 - 30/05/2001

Research Engineer

Institute of Advanced Technologies, PO Box 1-946, RO-721361 Bucharest, Romania

I worked for six years in R&D Department for Fine Mechanics and Optics. There I investigated various optical and mechanical devices, and have designed different apparatus including: optical systems (lens with large aperture, as well as lens for: video, TV cameras, and night vision devices), mechanical and optical accessories for photographic equipment and film processing tools.

R&D Photo and Optical Devices Department

EDUCATION AND TRAINING

01/09/2000 - 10/11/2007 PhD - Engineering

University "Politehnica" of Bucharest (Bucharest, Romania)

Faculty of Engineering and Management of Technological Systems

Nanotechnologies and Unconventional Systems

01/01/2003 - 30/07/2005 PhD Candidate

Washington State University (Pullman, WA, USA) School of Mechanical and Materials Engineering

Veterinary and Comparative Anatomy, Pharmacology and Philosophy (VCAPP)

01/01/1994 - 30/06/1994 MSc Mechanics

University "Politehnica" of Bucharest (Bucharest, Romania)

Faculty of Mechanical Engineering Precision Mechanics Specialization

01/10/1989 - 30/12/1993 BSc

BSc Mechanics

University "Politehnica" of Bucharest (Bucharest, Romania)

Faculty of Mechanical Engineering Precision Mechanics Specialization

01/2002 GRE Exam 10/2001 TOEFL Exam

03/1997 Specialization on

"Optical Correlation Applied to Pattern Recognition"

University "Politehnica" of Bucharest, Romania

PERSONAL SKILLS

Mother tongue(s)
Other language(s)

Romanian

UNDERSTANDING SPEAKING WRITING

Listening Reading Spoken interaction Spoken production

C1 C1 C1 C1 C1 C1 C1

TOEFL (October 2001): 227 (equivalent to 567 for the written test)

В1

В1

English French

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2: Proficient user

Common European Framework of Reference for Languages

Communication skills

 Enhanced through study-abroad experience (PhD candidate), and refined and rounded off through work-abroad experiences (Teaching Assistant and Research Assistant)

В1



Curriculum Vitae

Roxana-Mariana Beiu

Organisational / managerial skills

- I was involved in teaching ME220 Mechanics of Materials as a Teaching Assistant
- Organized a conference, "The Third Annual Mechanical Engineering Graduate Symposium School of Mechanical and Materials Engineering," Washington State University Pullman, WA, USA, Apr. 2003

Digital competence

SELF-ASSESSMENT

Information Communication Processing Communication Content creation Safety Problem solving

Independent User Independent User Independent User Independent User Independent User

Levels: Basic user - Independent user - Proficient user Digital competences - Self-assessment grid

- Very good command of office suite (word processor, spread sheet, presentation software)
- Very good command of photo editing software (Adobe Photoshop, Corel DRAW)
- Good knowledge of mathematical-based simulation packages (Matlab, EMExplorer, OptiFDTD)

Other skills

· Art crafting, painting, travelling.

Driving licence

B (since 2001)

ADDITIONAL INFORMATION

Publications 1 book

7 journals 1 ISI (IF = 1.637) 6 BDI 8 conferences 7 ISI 1 BDI

Presentations
Other Conferences

nferences 9

Citations 30 citations

Courses

3 courses (WSU: ME220 - "Mechanics of Materials"

UAV : EIME - "Elemente de Inginerie Mecanica si Electrica"

APTB - "Automatizarea Proceselor Tehnologice si Biotehnologice"

Projects

5 research projects:

- 2003-2005: "Developing new non-invasive brain measurement techniques," VCAPP, WSU, USA http://ipn.vetmed.wsu.edu/neuroscience
- 2015-2016: "Optical Coherence Tomography (OCT) systems with handheld and endoscope probes for real time investigations in material studies and for in vivo medical imaging"
- 2016-2018: "Optomechatronic Choppers with rotational discs and shafts with windows for metrological, biomedical, and laser manufacturing applications" (http://3om-group-optomechatronics.ro/bg297/)
- 2016-2018: "Handheld scanning probes with 1D and 2D galvoscanners for biomedical and industrial investigations using Optical Coherence Tomography (OCT)" (http://3om-groupoptomechatronics.ro/pte181/)
- 2017-2018: "Micro-Electro-Mechanical Systems (MEMS)-based handheld scanning probes for distortion-free biomedical imaging with Optical Coherence Tomography". http://3om-group-optomechatronics.ro/pedp1937/

Date: April 6, 2016 Roxana Beiu

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