Europass
Curriculum Vitae

Personal information

First name(s) / Surname(s)	**Hulea Mircea**
Address(es)	36, Bratianu I. C., 700037, Iasi, Romania
Telephone(s)	Mobile: (+40) (744) (824) (115)
E-mail	mhulea@tuiasi.ro, mircea.hulea@yahoo.com
Nationality	Romanian
Date of birth	24.04.1979
Gender	Male

Occupational field	**Postdoctoral researcher**
Name of the current employer	Technical University Gheorghe Asachi Iasi, Faculty of Electronics, Telecommunication and Information Technology 06.2010 – present

Education and training

Dates	11.2004 – 12.2008
Title of qualification awarded	PhD in Automatic Control
Principal subjects/occupational skills covered	Thesis Title: *Analysis and design of a speaker independent speech recognition system using neural networks.* The main research activities were aimed on: - Studying the neural networks of biological inspiration from theory to hardware implementation - Testing and developing methods suitable for implementation of speech recognition systems using networks of spiking neurons.
PhD Coordinator	Prof. Mihail Voicu
Name and type of organisation providing education and training	Technical University 'Gh. Asachi', Iasi, Faculty of Automatic Control and Computer Science
Level in national or international classification	High Confidence Rating given by the Romanian Agency for Quality Assurance in Higher Education
Dates	10.2003 – 07.2004
Title of qualification awarded	Master of Science in Applications of Advanced Computing Architectures
Principal subjects/occupational skills covered	Dissertation title: *Development Board for Vocal Control of Digital Equipment.* This device was designed as a speech recognition module which can be interfaced with any hardware equipment. Principal subjects: Neural Networks, Modern Concepts of Algorithms Designing and Implementation.
Name and type of organisation providing education and training	Technical University 'Gh. Asachi', Iasi, Faculty of Automatic Control and Computer Science
Level in national or international classification	High Confidence Rating given by the Romanian Agency for Quality Assurance in Higher Education
Dates	10.1998 – 07.2003
Title of qualification awarded	Bachelor of Science in Computer Science
Principal subjects/occupational skills covered	- Diploma thesis title: *Hardware Device for Vocal Command of the PC* - Principal subjects: Artificial intelligence, Digital Systems Designing, Algorithms Designing, Programming in Assembler
Name and type of organisation providing education and training	Technical University 'Gh. Asachi', Iasi, Faculty of Automatic Control and Computer Science

Level in national or international classification	High Confidence Rating given by the Romanian Agency for Quality Assurance in Higher Education

Work experience

Dates	06.2010 – present
Occupation or position held	Postdoctoral Researcher
Main activities and responsibilities	- Development of bioinspired cognitive - sensorial systems based on analogue neural networks; - Design of high performance time measuring systems using microcontrollers; - Research assistant in the national grant NANOPROSPECT where Technical University is one of the 11 partners - Several lectures in the field of embedded systems and on speech processing
Name and address of employer	Technical University 'Gh. Asachi', Faculty of Electronics, Telecommunications and Information Technology Carol I street, no. 11, Iasi, 700506, Romania
Type of business or sector	Research
Dates	10.2008 – 07.2010
Occupation or position held	Lecturer
Main activities and responsibilities	- Teaching the course and laboratory classes on *Neural Networks* - Teaching the course for *Applications of Artificial Intelligence*
Name and address of employer	Technical University 'Gh. Asachi' , Faculty of Automatic Control and Computer Science Dimitrie Mangeron street, no. 27, Iasi, 700050, Romania
Type of business or sector	Teaching
Dates	10.2009 – present
Occupation or position held	Teaching Assistant
Main activities and responsibilities	- Teaching laboratory classes on *Informatics*
Name and address of employer	University of Agricultural Science and Veterinary Medicine 'Ion Ionescu de la Brad' Mihail Sadoveanu alley, no. 3, Iasi, 700490, Romania
Type of business or sector	Teaching
Dates	03.2009 – 05.2010
Occupation or position held	System Engineer
Main activities and responsibilities	- Computer Network administration - 3D Advanced Visualisation Centre administration
Name and address of employer	University of Agricultural Science and Veterinary Medicine 'Ion Ionescu de la Brad' Iasi, Romania
Type of business or sector	Engineering

Personal skills and competences

Mother tongue(s)	**Romanian**
Other language(s)	**English, French**
	Foreign languages certificates: Cambridge FCE, grade C, examination year 2003.

Self-assessment	Understanding				Speaking				Writing	
European level (*)	Listening		Reading		Spoken interaction		Spoken production			
English	C1	Proficient user	C2	Proficient user	B2	Independent user	B2	Independent user	C2	Proficient user
French	A2	Basic user	B1	Independent User	A1	Basic user	A1	Basic user	A1	Basic user

(*) Common European Framework of Reference for Languages

Social skills and competences	- Team work:
	  - I worked in various research teams at Faculty of Automatic Control and Computer Science and at Faculty of Electronics, Telecommunications and Information Technology,
	  - I participated as the representative of Technical University "Gheorghe Asachi", Iasi at working meetings of NANOPROSPECT national grant;
	  - I worked at the research department of the MyTronic-LEDON, Gmbh multinational company from Germany.
	- Multicultural medium adaptability:
	  - As postdoctoral student I participated at a research external stage at the IUT d'Angouleme, University of Poitiers, France where I coordinated a team of one PhD student and one undergraduate student for developing a multidisciplinary research project.
	  - I have participated at SOCORO 2010 summer school in the field of Social and Cognitive Robotics where I was involved in multinational research teams.
	  - As PhD student I obtained a Socrates-Erasmus scholarship in the United Kingdom at The University of Sheffield, where I interacted with different people from academic medium.

Organisational skills and competences	- Good experience in project management gained while working at different projects during my master studies. PhD and post-doctoral research.
	- Sense of organisation gained:
	  - As project manager in a grant obtained from CNCSIS Romania through a research programme dedicated to PhD Students.
	  - Helping in managing the national grant NANOPROSPECT financed by ANCS Romania;
	  - Taking part in organizing committee of the 6th European Conference on intelligent Systems and Technologies.

Technical skills and competences	- Good experience in research gained during my doctoral programme and during my dissertation preparation at the Technical University from Iasi, Romania. - Good experience in microcontroller programming and hardware design. Since I was preparing my diploma paper during last year of graduation studies, I developed many hardware projects independently or in a team. - Good experience in technical command of digital equipment gained as administrator of 3D Visual System at the University of Agricultural Science and Veterinary Medicine from Iasi, Romania.
Computer skills and competences	- Good experience in programming languages Assembler, C, C++ - Familiarised with Java, Visual C, Matlab - Good experience in using Office Word, Excel, PowerPoint
Driving licence	Category B
Additional information	**External research stages** - September 2011 – November 2011 – accepted for a Postdoctoral research stage at the School of Computing, Engineering and Information Sciences from the Northumbria University, Newcastle, United Kingdom. - Mars 2011 – April 2011 – Postdoctoral research stage at the University of Poitiers, IUT d' Anglouleme, France. - Mars 2006 – May 2006 – Erasmus –Socrates scholarship as PhD student at the University of Sheffield, United Kingdom. **Publications** Articles: M.Hulea, *A new method to obtain non-volatile memory for networks of spiking neurons*, Memoirs of Scientific Sections, Tome XXXIII, pp. 129-146, 2010; url: http://iit.iit.tuiasi.ro/Reviste/mem_sc_st_2010/mss_series_IV_tome_XXXIII_2010_129.pdf. M.Hulea, *A model of silicon neurons suitable for speech recognition*", CEAI Journal, Vol. 10, No. 4, pp 32-41, 2008; url: http://ceai.srait.ro/index.php/ceai/article/viewFile/263/196. M.Hulea**,** *Electronic model of neurons for neural networks unsupervised learning*, Buletinul Institutului Politehnic, Iasi, 2006; M.Hulea, *Development board for vocal control of digital equipment*, Buletinul Institutului Politehnic, Iasi, 2005; Conferences: M. Hulea, L. Dascalescu, M.C.Plopeanu, H.N. Teodorescu, *Correlations between surface electrical potential distribution and optically characterized non-uniformity of non-vowen fabrics for air-filters*

H.N. Teodorescu, M.Hulea, *Improving Time Measuring Precision in Embeedded Systems with a Hybrid Measuring Method,* accepted for presentation at IDAACS'11*, Czech Republic, September 2011.*

H.N. Teodorescu, M.Hulea, *Error Analysis of Measuring the Time Intervals with a Combined Measuring Method, Recent Researches in Communications, Automation, Signal Processing, Nanotechnology, Astronomy & Nuclear Physics*, Z. Bojkovic, et. al. Eds., WSEAS Publishing House, 2011, pp 265-270

M.Hulea, A. Untu, Electronic Device for Parallel Preprocessing of Vocal Spectrum, CONSILR 2010, Bucharest, Romania, 2010.

M.Hulea, *A biologically inspired model of spiking neurons suitable for analog IC design*" ICAI 2008 Proceedings, CSREA Press, Las Vegas Nevada, USA, pp 807-812, 2008;

M.Hulea, *A biologically inspired rule for electronic synapses plasticity* , Proceedings of SACCS 2007, Iasi, Romania, 2007;

M.Hulea, *An artificial network of spiking neurons for modelling the Pavlov reflex*, Proceedings of SACCS 2007, Iasi, Romania, 2007.

Patents

M.Hulea, *A Method for Phoneme Recognition Using a Biologically Inspired Neuron Model*, patent no. A 2009 00531 (A2).

Patent requests:

H.N.Teodorescu, M.Hulea, *Method and System for Time Measuring,* patent application no. A/00157/2011.

Posters:

M. Hulea, *Bioinspired Neural Networks and Applications*, Socoro 2010 – Social and Cognitive Robotics; international summer school, Iasi, Romania, July 2010.

H.N. Teodorescu, M. Hulea, *Method and System for Time Measuring,* Inventica 2011, Iasi, Romania, May 2011;
Gold medal award for this presentation.

Grants
- *Designing of a System for Speaker Independent Speech Recognition using Networks of Spiking Neurons;* grant position: project manager; period: 2007 – 2008
  url: http://www.ac.tuiasi.ro/upload/48.pdf
- *Nanotechnology in Romania – prospective study (NANOPROSPECT)*, grant position: research assistant; period: November 2010 – May 2011.