

Curriculum vitae Europass



Personal Information

Name **CARAIMAN, Simona**
 E-mail sarustei@cs.tuiasi.ro; simonaarustei@gmail.com;
 Nationality **Romanian**
 Birth date **January 9th, 1982**

Professional experience

Period February 2007 - present:
 Position (teaching assistant, assistant professor) *associate professor*
 Employer Technical University of Iasi, Department of Computer Engineering
 Main activities and responsibilities Teaching (lectures and lab work): Image processing, Advanced image processing, Visualization in distributed systems (GPU programming), Computer Graphics, High Performance Computing, Web Programming.
 Member of the Faculty Council, Faculty Research Committee
 Advisor for diploma and master theses and students research contests
 Scientific research

Education

Period 2000...2005
 Qualification awarded Computer Engineer, Title of the diploma thesis "Image based modelling of architectural scenes"
 Organisation Technical University of Iasi, Romania

Period 2005...2006
 Qualification awarded Master in Computer Engineering (Distributed Systems Track), Title of the dissertation: "3D laser scanner point cloud processing" (Technical University of Vienna, Austria)
 Organisation Technical University of Iasi, Romania

Period 2005...2010
 Qualification awarded Doctor of Philosophy in Computer Engineering, Title of the doctoral thesis: "High Performance Computer Graphics", Coordinator: prof. Vasile Ion Manta, Ph.D.
 Organisation Technical University of Iasi, Romania

Personal skills and competences

Mother tongue Romanian

Other languages

English

Spanish

Technical skills and competences

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user
B1	Independent user	B1	Independent user	B1	Independent user	B1	Independent user	B1	Independent user

Fields of interest: Digital image processing, Computer Vision, Visualization, Machine Learning, High performance computing (parallel computing, General Purpose GPU programming, distributed systems, quantum computing).

Other relevant competences

Experience in *image processing and understanding*
Experience in *management of research projects*:
Natural sense of vision through acoustics and haptics (Sound of Vision), grant Horizon 2020, No. 643636, total project budget 3.900.000 EUR www.soundofvision.net
Responsibilities: lead contact for partner TUI, coordinator of the *3D Processing* work group, member of the Steering Committee (out of 3 members)
Trainer for CONTINENTAL AG (Embedded C Training – Programming automotive applications using C language)
Attendance in a seminar on entrepreneurship, 1 Aprilie – 1 Mai 2003, Malaga, Spain

Additional information

1. Financing the research activity:

- Grants/research contracts, out of which 2 international projects:

Natural sense of vision through acoustics and haptics (Sound of Vision), grant H2020, Nr. 643636, 2015 – 2017, (TUI coordinator - budget EUR 424000)
TRAVEE – Virtual Therapist through Augmented Feedback for Neuromotor Recovery, 2014-2016 (member)
USMED – Improving the diagnostics and therapy using an integrated clinical and para-clinical data management system, POS CCE, 2014-2015 (member)
ORGANZA - Network of Medium Sized Creative Cities - 0757R2, INTERREG IVC, 2010 – 2012 (member)
Classical and quantum Models for the Gauge Fields, CNCSIS-UEFISCU, 2007 – 2010 (member)
Academic Grid for Complex Applications (GRAI), CEEEX, 2006 – 2008 (member)
Intelligent Systems and Methods for Optimization, Monitoring and Control of District Heating Networks (SISTERMO), CEEEX, 2006 – 2008 (member)
Quantum Computing Models: Implementations of Quantum Algorithms in QCL, CNCSIS, 2006 – 2007 (member)

- Post-doctoral research

"Quantum Computing Models: Applications of Quantum Algorithms to Graphics Processing", – PERFORM-ERA-ID 57649, Technical University of Iasi, EUR 27348, 2011 – 2013

- Scholarships/sponsorships:

Doctoral scholarship from Continental AG Iasi, 2007 – 2009
Doctoral sponsorship from Siemens PSE, 2005 – 2006
Mobility scholarship – Erasmus, March-July 2006
Mobility scholarship – Leonardo da Vinci, March - June 2003

2. Publications:

17 scientific papers indexed by ISI; 7 books/book chapters; 11 scientific papers in journals; 26 scientific papers presented at international conferences; Citations: 162 (Google Scholar), 34 (ISI Thompson, excluding autocitations)

3. Activity in the scientific community:

Member in the Organizing Committees of international conferences: SACCS 2007, ICSTCC 2011, ICSTCC 2017, invited sessions: Computer Graphics la 14th Intl. Conf. on System Theory and Control; Human Computer Interaction la 21st Intl. Conf. on System Theory, Control and Computing.

Member of the Program Committee WCSIT14 <http://www.wcsit.eu/>

Invited talk on *Quantum Information Processing: An Emerging Field* at WCSIT'14

Reviewer for IEEE Transactions on Image Processing, Quantum Information Processing, IEEE Signal Processing Letters, Intl Journal of Theoretical Physics, Bulletin of the Technical University of Iasi, ICSTCC 2010-2017, WCSIT'14

4. Research visits abroad:

Institut für Computergraphik und Algorithmen, TU Vienna, Austria, June – Sept. 2012

Erasmus research visit, Computer Graphics Institute, TU Vienna, Austria, March – July 2006.

"The Computer Engineering Students Training", The Leonardo da Vinci Program, Malaga, Spain, March – June 2003.

5. Distinctions and prizes:

"Best paper award by a young researcher" at the 15th International Conference on System Theory and Control,

ACM SIGMICRO & IBM Student Grant, ACM International Conference on Computing Frontiers, 18-20 Mai 2009, Ischia, Italia.

UEFISCDI research prize for the paper *Image segmentation on a quantum computer*, *Quantum Information Processing*, vol 14(5), pp. 1693-1715, 2015