

Europass Curriculum Vitae



Personal information

First name(s) / Surname(s) **Gîrbacia Florin Stelian**
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E-mail garbacia@unitbv.ro
Nationality Romanian
Gender Male

Occupational field **Research and Education**

Work experience

Dates	October 2012 - Present
Occupation or position held	Professor at Transilvania University of Brasov , Department of Department of Automotive and Transport Engineering
Main activities and responsibilities	Research and Education activities in Computer Aided Design, Virtual and Augmented Reality for Industrial Application, Haptic Sytems , Design of Virtual Environments, Computer programming, 3D Modeling, Human Computer Interaction.
Name and address of employer	Transilvania University of Brasov, Eroilor 23, RO-500036 Brasov, Romania, www.unitbv.ro
Type of business or sector	Education and research
Dates	June 2010 –June 2013
Occupation or position held	Postdoctoral Researcher at Transilvania University of Brasov
Main activities and responsibilities	Research activities in development of VR/AR applications for industrial and medical applications
Name and address of employer	Transilvania University of Brasov, Eroilor 23, RO-500036 Brasov, Romania, www.unitbv.ro
Type of business or sector	Education and research
Dates	Ian. 2008 – May 2010
Occupation or position held	full time employee, researcher
Main activities and responsibilities	Research activities in national and European Projects: C++ Programmer for national project CEEX-II-03 MERVI, national project VirDent, C++ Programmer for European project 4WARD, development of a software component for pipe inspection robot, CAD modeling,.
Name and address of employer	Siemens PSE Romania SRL, Colina Universității Street 1, C16,500068 Braşov Romania, http://www.pse.siemens.ro
Type of business or sector	Industry

Education and training

Dates	2003-2007
Title of qualification awarded	PhD
Principal subjects/occupational skills covered	Research in Virtual Reality Technologies and Computer Aided Design Phd thesis title: Development of a multimodal interface for virtual reality aided design
Name and type of organisation providing education and training	Transilvania University of Brasov, Eroilor 23, RO-500036 Brasov, Romania, www.unitbv.ro June 2019 Certificate of habilitation in the field of Automotive Engineering Universitatea din Pitești Habilitation thesis title: Realitate virtuală pentru proiectarea autovehiculelor

Personal skills and competences

Mother tongue(s) **Romanian**

Other language(s)

Self-assessment

European level ()*

English

German

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
C1	Effective Operational Proficiency	C1	Effective Operational Proficiency	C1	Effective Operational Proficiency	C1	Effective Operational Proficiency	C1	Effective Operational Proficiency
A1	Basic user	A1	Basic user	A1	Basic user	A1	Basic user	A1	Basic user

(*) [Common European Framework of Reference for Languages](http://www.cerl.eu/)

Organisational skills and competences

Conferences/workshop organizing:

- The first International Workshop on Virtual Reality, Brasov, Romania, 18-19 May 2006, FP6 - SSA Project ACC, Contract no.16565, Vega project, member organizing committee.
<http://www.project-vega.ro/workshop/Workshop%202nd%20call.htm>
- Advanced Summer Institute on ENGINEERING-DESIGN: Eco-design, Technologies and Green Energy, 14-21 July 2004, Sinaia, Brasov, Romania, member organizing committee.
<http://www.rvv.ro/adept/ADEPT%20ANUNT%20ASI-DRAFT.htm>
- The 2nd Advanced Study Institute on "Product Engineering Tools and Methods based on Virtual Reality", Chania, Crete, 30 May - 6 June 200, member organizing committee.
http://www.project-vega.ro/news/asi_vega_2007/ASI%20site/ASI%20call.htm
- FP6 INTUITION – VEGA joint meeting 20-21 February 2008, Brasov, Romania, member organizing committee.
http://www.project-vega.ro/news/asi_vega_2007/ASI%20site/ASI%20call.htm

Technical skills and competences

Computer Aided Design, Virtual Reality Technologies, Augmented Reality Applications, Human Computer Interfaces, Virtual Reality Programming, 3D Programming, 3D Modeling of Virtual Environments, Design of Virtual Reality immersive systems, Development of custom haptic systems, Development of Virtual Reality medical simulators, Virtual prototyping, Interfacing various Virtual Reality devices, Image Processing, Robotics.

Additional information

Publications in ISI Web of Science rated journals: 9
Publications in ISI indexed journals & volumes: 43
Publications in journals & BDI indexed volumes: 36
Didactic materials published in national publishing houses: 8
Chapters in books published abroad: 17 (in Springer)
Patents granted / proposals for patents: 1 / 3
Citations in ISI Web of Science cited/indexed journals/volumes: 85
Citations in BDI indexed journals/volumes: over 150
Referent for ISI Web of Science rated / indexed journals: more than 10 journals (mostly published by prestigious publishers from abroad - Elsevier, Springer, Taylor & Francis, IEEE, PlosOne)
Prizes: Best paper award ACHI 2012 conference for the paper:
Gîrbacia, F. Evaluation of cognitive effort in the perception of engineering drawings as 3D models, Proceedings of The Fifth International Conference on Advances in Computer-Human Interactions (ACHI 2012), Valencia, Spain.

International Research projects

1. H2020 –TWINN- eHeritage - Expanding the Research and Innovation Capacity in Cultural Heritage Virtual Reality Applications, contract H2020-TWINN-2015 - 692103 Position : Member.
2. FP6, VEGA – Virtual Reality in Product Design and Robotics, Contract FP6-IST 16565, 2004-2007, Position : Member.
3. FP6, INTUITION – Network of excellence on virtual reality and virtual environments applications for future workspaces, Contract FP6-IST 507248-2, 2004 -2008, Position : Member.
4. FP5, ADEPT – Advanced Computer Aided Design of Ecological Products and Tehnologies Integrating Green Energy Sources, FP5, G1MA-CT-2002-04038, 2002-2005, Position : Member

National Research projects

5. PN-II-PT-PCCA-2013-4-0647 – ROBOCORE - Robotic assisted prostate biopsy, a high precision innovative method, 2014 -2017, Position : UTBV partner leader;
6. PN-II-PT-PCCA-2011-3.2-0414, CHANCE - Robotic assisted brachytherapy, an innovative approach of inoperable cancers, 2012 -2015, Position : Member;
7. PN, TOMIS - Using virtual reality in reconstructing 3D multimode Historic sites, Contract 11-041 / 14.09.2007, Position : UTBV partner member.
8. TRIMA – Virtual reality techniques and technologies applied in engineering, medicine and art cod CNCISIS 80, 2006-2008, Position : Member.
9. PN, IDEI – IREAL- Interfata cu retur haptic pentru prototiparea in mediu imersiv, Contract nr 132-2007, 2007-2009, Position : Member.
10. CEEX –I, MERVI – Mediu colaborativ de Realitate Virtuală pentru planificare preoperatorie în ortopedie, Contract CEEX nr. 114/2006, 2006-2008, Position : Member.
11. CEEX –II, VIRPE – Virtual reality for product engineering, Contract CEEX nr.5920 /2006, 2006-2008, Position : Member.
12. CNCISIS tip AT nr. 170 Interfata de realitate virtuala pentru simularea mecanismelor articulate utilizând teoria sistemelor multicorp, proiect, director de proiect, 2004-2005, Position : Member.

Patents

13. Talabă D., Gîrbacia Florin, Butnaru T. , Sisca S. Sistem reconfigurabil de vizualizare stereoscopica tip CAVE, Patent no. BI cbi A 00300 2010.

Recent publications

14. Voinea, G. D., Gîrbacia, F., Duguleană, M., Boboc, R. G., & Gheorghe, C. (2023). Mapping the Emergent Trends in Industrial Augmented Reality. Electronics, 12(7), 1719. Link: <https://www.mdpi.com/2079-9292/12/7/1719>
15. Voinea, G. D., Gîrbacia, F., Postelnicu, C. C., Duguleana, M., Antonya, C., Soica, A., & Stănescu, R. C. (2022). Study of Social Presence While Interacting in Metaverse with an Augmented Avatar during Autonomous Driving. Applied Sciences, 12(22), 11804. Link: <https://www.mdpi.com/2076-3417/12/22/11804>
16. Boboc, R. G., Băutu, E., Gîrbacia, F., Popovici, N., & Popovici, D. M. (2022). Augmented Reality in Cultural Heritage: An Overview of the Last Decade of Applications. Applied Sciences, 12(19), 9859. Link: <https://www.mdpi.com/1860452>
17. Boboc, R.G., Gîrbacia, F. and Butilă, E.V. (2020). The Application of Augmented Reality in the Automotive Industry: A Systematic Literature Review. Applied Sciences, 10(12), p.4259.Link: <https://www.mdpi.com/2076-3417/10/12/4259>
18. Postelnicu, C.-C., Gîrbacia, F., Talaba, D. (2012):EOG-based visual navigation interface development. Expert Systems with Applications, 39 (12), pp. 10857-10866, DOI: 10.1016/j.eswa.2012.03.007
19. Gîrbacia F., Voinea G. D., Gîrbacia T. (2018): Vibrotactile Patterns for Smartphone Based ADAS Warnings. In: Burnete N., Varga B. (eds) Proceedings of the 4th International Congress of Automotive and Transport Engineering (AMMA 2018). AMMA2018 2018. Proceedings in Automotive Engineering. pp. 122-127, Springer, Cham. Link: https://link.springer.com/chapter/10.1007/978-3-319-94409-8_15
20. Gîrbacia F., (2012): Evaluation of cognitive effort in the perception of engineering drawings as 3D models, Proceedings of The Fifth International Conference on Advances in Computer-Human Interactions, Valencia, Spain, pp. 247 – 250, Iaria press, 2012 (Best Paper Award)

I hereby certify that the above statements are true.