

# Europass Curriculum Vitae



#### Personal information

First name(s) / Surname(s)

**Iuliana Armas** 

Address(es)

University of Bucharest, Faculty of Geography, N.Balcescu 1, sect. 1, 010041, Bucharest, Romania

Telephone(s) Fi

Fix: +40213053841

Fax(es)

+40213149525

E-mail

 $\underline{\text{lulia\_armas@geo.unibuc.ro}}; iuliaarmas@yahoo.com$ 

Web page

http://www.geodinamic.ro; http://www.unibuc.ro/prof/armas\_i/

http://orcid.org/0000-0002-8020-6767 ResearcherID: B-6772-2011

Nationality

Romanian

#### Occupational field

Physical Geography, Natural Hazards and Risks, Vulnerabity Assessments Fluvial Geomorphology, Landslides, Risk Perception

#### Work experience

Dates

2004 to present day

Occupation or position held

Univ. Professor

Main activities and responsibilities

**Teaching and research** activities in Physical Geography, Applied Geomorphology, Assessing Natural Hazards and Risks, Risk perception; Entitled to co-ordinate Geography PhD students from the University of Bucharest (Ordin M.E.C. nr. 4697/14.08.2009).

Director of the Simion Mehedinti Doctoral School,

Coordinator of the Disaster Management Master, the first program of its kind in Romania <a href="http://geo.unibuc.ro/dm/English.html">http://geo.unibuc.ro/dm/English.html</a>

**Editorial activities**: member of the editorial board of Anale de Geografie - Universitatea Spiru Haret, Riscuri si Catastrofe, Geo Review; Forum Geografic, Chair of GeoPatterns - the journal of the Center for Risk Studies, Spatial Modelling, Terrestrial and Coastal System Dynamics, Department of Geomorphology, Faculty of Geography, University of Bucharest <a href="http://www.geodinamic.ro/geo-patterns">http://www.geodinamic.ro/geo-patterns</a>

Peer reviewer for ISI-indexed Journals: Natural Hazards, Mountain Research and Development (MRD), Earth Science Informatics, Risk Analysis, Earth Science Informatics, Journal of rational-emotive-cognitive-behavior therapy, Remote Sensing, Journal of Environmental Planning and Management, International Journal of Disaster Risk Reduction, Journal of Mountain Science.

**Member of Professional Societies:** AGR-Romanian Association of Geomorphology; Romanian Geographic Society (during 2000-2004 I was member in the Geographical Society Bureau, Bucharest Filial); "Arbeitsgruppe für Naturgefahren", Germany; EGU, SRA – Society of Risk Analysis

-1996-2000: vice-president in the *Cartography and Children Working Group - CCWG* (Chair Dr. Jacqueline M. Anderson, Canada), member in The Romanian Cartography Association, taking part to the workshops On Cartographic Curricula & Research in the Balkans (Kastoria, 1997), Cartography in Southeast Europe (Thessaloniki, 1998) and setting up the Barbara Petchenik contest on national level (1999).

Name and address of employer

Bucharest University, Faculty of Geography, Bd. Balcescu 1, sector 1, 010041, Bucharest, Romania

Type of business or sector

Education and reserach

#### Education and training

Dates

1995

Title of qualification awarded

PhD in Geography

Name and type of organisation providing education and training

Bucharest University, Faculty of Geography, Bucharest, Romania

Level in national or international classification ISCED 6

Dates

1986 - 1990 PhD Student (full time)

Awarded: Studentship, Koln, Germany (12 months)

related work:

- supervising two diploma works of students
- seminars and practical work in Theoretical Geography Physical Geography, Geomorphology, Plains
- chairing and convening scientific meetings.

Title of qualification awarded

BSc. in Geography

Principal subjects/occupational skills covered

Geology, Physical Geography, Cartography, Climatology, Hidrology, Pedology, Biogeography, Human Geography

- -Knowledge and understanding of geographical phenomena,
- -first place at admission exam
- study scholarships
- student leader, responsible for the organisation of student conferences

Name and type of organisation providing education and training University of Bucharest, Faculty of Geography, Bucharest, Romania

Level in national or international classification

ISCED 5

Dates

2004-2008

Title of qualification awarded

**BSc.** in Psychology

Principal subjects/occupational skills

covered

Child Development, Cognitive Science, Social Psychology, Neuroscience, Statistics, Clinical Psychology, Social/Personality Psychology; Pedagogy and methods of teaching

Name and type of organisation providing education and training

University of Bucharest, Faculty of Psychology, Panduri 90, Sector 5, Bucharest, Romania

Level in national or international classification

ISCED 5

Training

19931994: Germany, Institute of Geography, Institute of Geology, University of Köln - Geology and Fluvial Geomorphology courses and seminars, under the supervision of Prof.Dr.Hab. E. Brunotte 2006: Bonn, Germany - FORM-OSE Post-Graduate Training School: MultiRISK, Concepts to approach multiple hazards and risks

2008: ESRI-GIS Romania - ArcGIS Desktop I + II

2008: International Institute for Geo-Information Science and Earth Observation, Enschede, The Netherlands - Applied Earth Sciences Course: Principles and Applications of Remote Sensing and GIS in Applied Earth Sciences

2009: International Institute for Geo-Information Science and Earth Observation, Enschede, The Netherlands - Applied Earth Sciences Course: Multihazard and Risk Assessment

2009: University of Agronomy and Veterinary Medicine, Bucharest, Romania - ROSA/ESA/DLR: Radar Remote Sensing Course

2012: Romsym Consulting Training Center - SPSS Modeler; Advanced SPSS Statistics and Neural Network

2016: University of Trento, Dep of Civil, Environmental and Mechanical Engineering, Trento, Italia -Spatial multicriteria analysis for environmental decision-making.

# Personal skills and competences

Mother tongue(s)

Romanian

Other language(s)

Page 2/5 - Curriculum vitae of For more information on Europass go to http://europass.cedefop.europa.eu Iuliana ARMAS © European Union, 2004-2010 24082010

# Self-assessment European level (\*)

# German English Greek

	Understanding			Spea	Writing	
	Listening	Reading	g Sp	ooken interaction	Spoken production	
C2		C2	C2		C1	C1
C2		C2	B2		B2	B2
A2		A1	A2		A2	A1

(\*) Common European Framework of Reference for Languages

#### Areas of competence

- Theoretical Geography
- Fluvial Geomorphology (terraces, captures, evolution)
- Dynamic geomorphology and Quantitative Modeling (thematic mapping, morphological levels, morphological regional models, quantitative geomorphology – morphometric models, non-linear multiple regression, Bayes probability, bivariate and multivariate statistics).
- Vulnerability, Risk and Natural Hazard Studies putting emphasis on landslide, floods and earthquakes.
- Studies concerning the attitudinal-perceptual component of natural hazard; the hazards and urban risks.

#### Additional information

- Director of the Center for Risk Studies, Spatial Modelling, Terrestrial and Coastal System Dynamics Department of Geomorphology, Faculty of Geography, University of Bucharest www.geodinamic.ro
- Right to drive doctorate in Geography at Bucharest University
- Has authored or coauthored 24 articles published in ISI international journals of high impact factor (and other 5 are in the evaluation process or in press), 1 book edited in Springer Verlag; 7 collaborations in book chapters published in Springer Verlag, 11 books and 5 school books; 5 book chapters published by Romanian publishers; over 200 communications in Romania and abroad.
- PI for 12 National and international research projects (won between 2001 and 2013; 9 research contracts financed from the budget and 3 international projects); being member of interdisciplinary teams in other 9 research projects among which 2 are international.
- MC member of three COST actions: "Semantic enrichment of 3D city models for sustainable urban development" (2009-2012) and "The EU in the new complex geography of economic systems: models, tools and policy evaluation" (since 2012) <a href="http://www.gecomplexity-cost.eu">http://www.gecomplexity-cost.eu</a>; TUD COST Action TU140- "Renewable energy and landscape quality CSO Approval date14/05/2014/ Start of Action16/10/2014/ End of Action15/10/2018 Romania din 10/04/2015
- Main scientific organizer and chairperson of several national scientific meetings. At the General Assembly EGU 2010, Prof. Armaş, with Dr. M. Bostenaru and Dr. Eng. A. Goretti coordinated the session NH9.12 The impact of natural hazards on urban areas and infrastructure, with over 15 oral and poster presentations (http://meetingorganizer.copernicus.org/EGU2010/session/2614).
- Invited as a subject matter expert in CapHaz-Net FP7 Contract No. 227073 EU Project, participating in the *Workshop on Vulnerability and Risk Perception of Natural Hazards* (11-12.03.2010, Haigerloch, Germany), and contributing to the draft reports for Risk Perception, Social Vulnerability and Risk Communication working groups (see results at <a href="https://www.caphaz-net.org/outcomes-results">www.caphaz-net.org/outcomes-results</a>).
- She serves as technical proposal reviewer for UEFISCDI
- Member CNATDCU

#### Awards

• Award of University of Bucharest for the years 2005, 2006, 2007.

Social skills and competences

Organisational skills and competences

Technical skills and competences

Computer skills and competences

Hard working, team spirit, perseverant, quickly adapting to new working environments, easily finding place in team works and shared projects, having the capacity to cope with high-stress situations.

good experience of project management, communication skills and team motivation, advanced experience in scientific analysis

Ability to analyze problems in a multi-disciplinary approach and to adapt to new fields of knowledge

good knowledge of productivity software (word processor, presentation and database software) good knowledge of Microsoft Windows operating system environment. advanced experience in quantitative (SPSS) statistical data analysis.

good command of photo editing and GIS/ RS/ cartography software: CorelDRAW, ESRI ArcGIS, ILWIS, ERDAS IMAGINE, Global Mapper

Driving licence

B category, since 1988

# Main publications

### **ISI-indexed Papers**

- Armas I. (2014), DIAGNOSIS OF LANDSLIDE RISK FOR INDIVIDUAL BUILDINGS. INSIGHTS FROM PRAHOVA SUBCARPATHIANS, ROMANIA, *Environmental Geology*, 71(11), pp 4637-4646, DOI: 10.1007/s12665-013-2854-5 <a href="http://link.springer.com/article/10.1007%2Fs12665-013-2854-5">http://link.springer.com/article/10.1007%2Fs12665-013-2854-5</a>
- Armas I., Gogoase Nistoran D., Osaci-Costache G., Brasoveanu L. (2013), MORPHO-DYNAMIC EVOLUTION PATTERNS OF SUBCARPATHIAN PRAHOVA RIVER (ROMANIA), *Catena*, 100:83-99 DOI: 10.1016/j.catena.2012.07.007. http://www.sciencedirect.com/science/article/pii/S0341816212001488
- Armas, I. and Gavris, A. (2013), Social vulnerability assessment using spatial multi-criteria analysis (SEVI model) and the Social Vulnerability Index (SoVI model) a case study for Bucharest, Romania, *Nat. Hazards Earth Syst. Sci.*, 13, 1481-1499, doi:10.5194/nhess-13-1481-2013, http://www.nat-hazards-earth-syst-sci.net/13/1481/2013/nhess-13-1481-2013.html
- **Armas I.**, Vartolomei Fl., Stroia Fl. (2014), Landslide susceptibility deterministic approach using geographical information systems: application to Breaza city, Romania, *Natural Hazards*, 70(2), pp. 995-1017 <a href="http://link.springer.com/article/10.1007/s11069-013-0857-x">http://link.springer.com/article/10.1007/s11069-013-0857-x</a>
- Armaş I., Ionescu, R si Posner (Nenciu) C. (2015). Flood risk perception along the Lower Danube River, Romania. *Natural Hazards*. 78(1):1-19, http://link.springer.com/article/10.1007/s11069-015-1939-8. Doi 10.1007/s11069-015-1938-8
- Armaş I, Gheorghe M., Lendvai A.-M., Dumitru P.D., Badescu O., Calin Al. (2016), InSAR Validation Based on GNSS Measurements in Bucharest, *International Journal of Remote Sensing* **37**(23):5565-5580 10.1080/01431161.2016.1244367
- Armaş I, Ionescu R., Gavris Al., Toma-Danila D. (2016) Vulnerability hotspots in Bucharest, Romania, Applied Geography 77:49-63.
- Armaş I., Toma D., Ionescu R., Gavris Al. (2016) Quantitative population loss assessment: Seismic scenarios for Bucharest using 2002 census data, GI\_Forum Journal 1: 30-40, doi 10.1553/giscience2016\_01\_s30. http://hw.oeaw.ac.at/0xc1aa500e%200x0033fe7a.pdf
- **Armaş, I.**, Mendes D., Gheorghe M., Popa R.G., Popovici D. (2017) Long-term ground deformation patterns of Bucharest using multitemporal InSAR and multivariate dynamic analyses: a possible transpressional system?. *Sci. Rep.* **7**, 43762; doi: 10.1038/srep43762.
- Armaş, I. Cretu R.Z, Ionescu R. (2017) Self-efficacy, stress, and locus of control: the psychology of earthquake risk perception in Bucharest, Romania, *International Journal of Disaster Risk Reduction*. **22**:71-76. DOI: 10.1016/j.ijdrr.2017.02.018
- Armaş I., Toma D., Ionescu R., Gavris Al. (2017) Vulnerability to Earthquake Hazard: Bucharest Case Study, Romania, *International Journal of Disaster Risk Science*, 8(2):182–195
- Bostenaru Dan M., **Armas I.** (2015), Earthquake impact on settlements: the role of urban and structural morphology, *Hazards Earth Syst. Sci.*, 15(10), 2283-2297, doi:10.5194/nhess-15-2283-2015 <a href="http://www.nat-hazards-earth-syst-sci.net/15/2283/2015/nhess-15-2283-2015.html">http://www.nat-hazards-earth-syst-sci.net/15/2283/2015/nhess-15-2283-2015.html</a>
- Toma-Danila D., **Armas I**. (2017), Insights into the possible seismic damage of residential buildings in Bucharest, Romania, at neighborhood resolution, *Bull Earthquake Eng*, 15(3): 1161–1184, DOI 10.1007/s10518-016-9997-1
- Fekete Al, Tzavella K, **Armas I**., Binner J., Garschagen M., Giupponi C., Mojtahed V., Pettita M., Schneiderbauer St., Serre D., (2015). Critical Data Source; Tool or Even Infrastructure? Challenges of Geographic Information Systems and Remote Sensing for Disaster Risk Governance, *ISPRS Int. J. Geo-Inf.*, 4(4), 1848-1869; doi:10.3390/ijgi4041848, http://www.mdpi.com/2220-9964/4/41848
- Gogoase Nistoran D.E., Ionescu C.S., Brasoveanu L. **Armaş** I., Opris I., Costinas S. (2018), Modeling hydrodynamic changes induced by Run-of-River hydropower plants along Prahova River (Romania), *Journal of Energy Engineering*. 144(2).
- **Armaş I**, Necea D., Miclăuș C. Fluvial terrace formation and controls in the Lower River Danube, SE Romania Quaternary International, <a href="https://doi.org/10.1016/j.quaint.2018.03.031">https://doi.org/10.1016/j.quaint.2018.03.031</a>

#### ISI-Indexed Book chapters

- Armas I., Radulian M. (2014) Spatial multi-criteria risk assessment for earthquake hazards in Bucharest, Romania, in Bostenaru Dan M., Armaş I., Goretti A., Eds., "Earthquake hazard impact and urban planning", Springer, ISBN: 978-94-007-7981-5, DOI: 10.1007/978-94-007-7981-5, http://www.springer.com/gp/book/9789400779808
- Armas I., Osaci G., Brasoveanu L., 2014, Forest landscape history using diachronic cartography and GIS. Case Study: Subcarpathian Prahova Valley, Romania, in Craciun C. si Bostenaru M., ed, Planning and designing sustainable and resilient landscapes, Springer Geography, ISBN 978-94-017-8535-8http://link.springer.com/chapter/10.1007%2F978-94-017-8536-5 1
- Bostenaru Dan M., **Armaş I**., Goretti A., Earthquake Hazard Impact and Urban Planning—An Introduction, in Bostenaru Dan M., **Armaş I**., Goretti A., Eds., "*Earthquake hazard impact and urban planning*", Springer, ISBN: 978-94-007-7981-5, DOI: 10.1007/978-94-007-7981-5, http://www.springer.com/gp/book/9789400779808
- Bostenaru Dan M., **Armaş I.**, Petrisor Al. I, Cerqua Al., Gociman C.O, Goretti A., Earthquake Hazard Impact and Urban Planning—Conclusion and Recommendations for Further Work, in Bostenaru Dan M., **Armaş I.**, Goretti A., Eds., "*Earthquake hazard impact and urban planning*", Springer, ISBN: 978-94-007-7981-5, DOI: 10.1007/978-94-007-7981-5,
- Gogoase Nistoran D., Gheorghe Popovici D., Craia Savin B. A., **Armaş I**. (2016), *GIS for Dam-Break Flooding. Study Area: Bicaz-Izvorul Muntelui* (*Romania*), in Maria Boştenaru Dan and Cerasella Crăciun (Eds): *Space and Time Visualisation*, ISBN 978-3-319-24940-7; DOI 10.1007/978-3-319-24942-1; http://www.springer.com/de/book/9783319249407.
- Grecu FI, Zaharia L., Ioana-Toroimac G.-I., **Armaş I.** (2016), Floods and flash-floods related to river channel dynamics, In Radoane, M., Vespremeanu-Stroe, A. (Eds.), *Landform Dynamics and Evolution in Romania*, Springer Geography, ISBN 978-3-319-32589-7.
- Osaci G., **Armaş I**. (2016), *Lost Landscapes: In Search of Cartographic Evidence* in Maria Boştenaru Dan and Cerasella Crăciun (Eds): *Space and Time Visualisation*, Springer Geography, pp 35-62. ISBN 978-3-319-24940-7; DOI 10.1007/978-3-319-24942-1; <a href="http://www.springer.com/de/book/9783319249407">http://www.springer.com/de/book/9783319249407</a>

#### **Edited Book in Springer**

Bostenaru Dan M., Armaş I., Goretti A., Eds. (2014), "Earthquake hazard impact and urban planning", Springer Verlag, ISBN: 978-94-007-7981-5, DOI: 10.1007/978-94-007-7981-5, http://www.springer.com/gp/book/9789400779808

#### **ISI Proceedings (full papers)**

- Armaş I., M. Necsoiu, D.A. Mendes, M. Gheorghe, and D. Gheorghe, (2015), "Ground Displacement Trends in an Urban Environment Using Multi-Temporal InSAR Analysis and Two Decades of Multi-Sensor Satellite-Based SAR Imagery", DOI: 10.13140/RG.2.1.1202.3847, 9th International Workshop Fringe 2015 Advances in the Science and Applications of SAR Interferometry and Sentinel-1 InSAR Workshop, Frascati, Italy; 03/2015
- Gheorghe M., **Armaş** I. (2016) Comparison of Multi-Temporal Differential Interferometry Techniques Applied to the Measurement of Bucharest City Subsidence, International Conference Environment at a Crossroads: SMART approaches for a sustainable Future, Procedia Environmental Sciences 32: 221-229. http://www.sciencedirect.com/science/journal/18780296/32 (ISI)
- Armaş I., Gavris Al. (2016), Census-Based Social Vulnerability Assessment For Bucharest, International Conference Environment at a Crossroads: SMART approaches for a sustainable Future, Procedia Environmental Sciences 32:138-146. http://www.sciencedirect.com/science/journal/18780296/32 (ISI)
- Toma-Danila D., **Armas I.**, Cioflan C.O. (2016) Conceptual framework for the seismic risk evaluation of transportation networks in Romania (chapter), pp 481-496. In: The 1940 Vrancea Earthquake. Issues, Insights and Lessons Learnt. Proceedings of the Symposium Commemorating 75 Years from November 10, 1940 Vrancea Earthquake. Eds: Vacareanu R. and Ionescu C., Springer Natural Hazards Series. Springer International Publishing. DOI 10.1007/978-3-319-29844-3
- Armaş I., Toma D., Ionescu R., Gavris Al. (2016) Quantitative population loss assessment: Seismic scenarios for Bucharest using 2002 census data, GI Forum Journal 1: 30-40, doi 10.1553/giscience2016 01 s30. http://hw.oeaw.ac.at/0xc1aa500e%200x0033fe7a.pdf (ISI)
- Gogoașe Nistoran, D.E., Ionescu C.S, Pătru G., **Armaș** I., Grigorie Omrani Ş. (2017) One dimensional sediment transport model to assess channel changes along Olteniţa-Călărași reach of Danube River, Romania, Sustainable Solutions for Energy and Environment, EENVIRO 2016, 26-28 October 2016, Bucharest, Romania, Energy Procedia 00 (2017) 000–000