

## RESUME

### Personal data

<b>Name</b>	<i>Jorjiashvili Nato</i>
<b>Date of birth</b>	<i>14.10.1977</i>
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### Education

	<b>Year</b>	<b>Name of University</b>	<b>Specialty</b>	<b>Academic Degree</b>
<b>1</b>	<b>1993-1998</b>	Iv.Javakhishvili Tbilisi State University. Faculty of Applied Mathematics and Computer Sciences	Applied Mathematics	Bachelor of Applied Mathematics
<b>2</b>	<b>1998-2000</b>	Iv.Javakhishvili Tbilisi State University. Faculty of Applied Mathematics and Computer Sciences	Applied Mathematics	Master of Applied Mathematics
<b>3</b>	<b>2004</b>	Iv.Javakhishvili Tbilisi State University. Department of Random Processes theory	Physics and Mathematics	PhD
<b>4</b>	<b>2005-2006</b>	Seismology, Earthquake Engineering and Disaster Mitigation (Training Course). Tsukuba. Japan.	Disaster Mitigation	Master of Disaster Mitigation

### Work Experience

	<b>Years</b>	<b>Position</b>	<b>Department/Division</b>	<b>Name of Organization</b>
<b>1</b>	1999-2004	Assistant, Researcher	Department of Random Processes theory	Iv.Javakhishvili Tbilisi State University. Tbilisi. Georgia
<b>2</b>	2004-2006	Researcher	United National Survey for Seismic Protection of Georgia	Institute of Geophysics Tbilisi. Georgia
<b>3</b>	2006-2008	Head of the Department	Department of Seismic Hazard and Risk Analysis	Seismic Monitoring Center, Tbilisi. Georgia
<b>4</b>	Since 2008	Head of the Department	Department of Seismic Hazard and Risk Analysis	Seismic Monitoring Center at the faculty of Earth Sciences at Ilia State University, Tbilisi. Georgia

5	Since 2008	Asistant Professor	Institute of Earth Sciences	Ilia State University
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### Participation in Scientific Grant Projects

	Years	Role in the Project	Name of the Project	Donor Organization
1	1998-2000	Researcher	“A New Approach to Analysing Fuzzy Data and Supporting Decision-Making Regarding the Possibility of Esrthquake Occurence”.	INTAS-OPEN-97-2126
2	2000-2005	Researcher	“Modernization and development of Seismic Network of Georgia”	CRDF project GEG2-3334-TB-03
3	2005-2006	Researcher	“Seismic Risk in large Cities of Caucasus. Tools for Risk Management (SeRiCiCau)”	NATO SfP project 974320
4	2006-2008	Main Personnel	Derivation velocity model of Georgia and adjacent territories and detracton of earthquake source dynamic parameters in Caucasus with waveform modeling	Georgia National Science Foundation (GNSF)
5	2008-2009	Seismologist, GIS Expert	Seismic Hazard and Risk Assessment of Georgia – Modern Methodology	Georgia National Science Foundation (GNSF)

### Participation in international scientific forums

	Year	Name of the event	Title of Presentation	Place of Event
1	2000	International Conference dedicated to decision making problems of earthquake possibilities		Iv.Javakhishvili Tbilisi State University
2	2006	International Institute of Seismology and Earthquake Engineering. Conference. Presentation of results obtained in frames of International Program.	Handling Uncertainties in Seismic Hazard Assessment using Fuzzy Analysis	Tsukuba. Japan
3	2007	Special meeting at ETH Zurich	Development of Seismic Data processing, monitoring and seismic hazard assessment in Georgia	Zurich, Switzerland
4	2007	Conference commemorating the 50th anniversary of the 1957 Gobi-Altay Earthquake	Seismicity and Rate changes in Caucasus Region	Ulaanbaatar. Mongolia
5	2008	7-th General Assembly of Asian Seismological	Seismic Network and Empirical Attenuation	Tsukuba, Japan

		Commission (ASC2008)	Relation of Ground motion of Caucasus Region	
6	2009	Journées Luxembourgeoises de Geodynamique (JLG 95)	Attenuation relation and development of seismic hazard of Caucasus region	Echterchan, Luxembourg
7	2010	International Conference on Climate Change Curricula in Higher Education	Field studies of Javakheti water resources and retrospective analysis of historical data	Tbilisi, Georgia
8	2010	European Seismological Commission 32nd General Assembly	Recent Earthquake in Racha Region and Statistical analysis	Montpellier, France
9	2012	EGU General Assembly 2012	Uncertainties related to seismic hazard assessment	Vienna, Austria
10	2012	Disaster Risk Management-Challenge for Development	Seismic Hazard Assessment in Georgia	Tbilisi, Georgia
11	2013	AGU 2013	Assessment of uncertainties related to seismic hazard using fuzzy analysis	Cancun, Mexico
12	2013	Knowledge for the Future	New Ground Motion Prediction Models for Caucasus Region	Gothenburg, Sweden
13	2014	International Symposium on Geodesy for Earthquake and Natural Hazards	Seismic Hazard Analysis of Adjara Region in Georgia	Matsushima, Sendai, Japan

### Trainings

	year	Course name	Organization on place of training
1	2008	Microtremor Array Exploration Technique- SPAC Method	Tsukuba, Japan, International Institute of Seismology and Earthquake Engineering
2	2010	ESC2010 Young seismologist training course in seismic hazard	Montpellier, France

**Additional information (Awards, Stipends, Membership of different scientific organizations (optional))**

President's Scholarship, (2004-2007)

Scholarship of International Lithosphere Program (ILP), 2007

Berkner Scholarship, 2013.

Member of American Geophysical Union (AGU).

Member of Georgian Society of Civil Engineers (GSCE).

**Spoken languages**

*Georgian, Russian, English and little Japanese*

**List of Publications**

**1. "A New Approach to Analysing Fuzzy Data and Supporting Decision-Making Regarding the Possibility of Earthquake Occurrence".** *INTAS-OPEN-97-2126. Final Report. F.Criado, T.Gachechiladze, N.Jorjiashvili, Z.Khvedelidze, H.Meladze, J.Sanchez, G.Sirbiladze, G.Tsertsvadze. Theory of Connectivity and Apportionment of Representative Activity Chains in the Problem of Decision-making Concerning Earthquake Possibility. 2000. Reference No.: INTAS-97-2126*

**2. Probabilistic-Possibilistic Analysis of Insufficient Expert Data.** *N. Jorjiashvili, G.Sirbiladze. Proc.of Jav. TSU App. Math. and Inf. Sci., Vol. 331 (20), No.1 (2001). Research funded by INTAS no 2126 (A )*

**3. Theory of Connectivity and Apportionment of Representative Activity Chains in the Problem of Decision-making Concerning Earthquake Possibility.** *F.Criado, T.Gachechiladze, N.Jorjiashvili, Z.Khvedelidze, H.Meladze, G.Sirbiladze, G.Tsertsvadze. App. Math. and Inf. – Tbilisi – 2001 –v.6, №.2 – pp.65-75;*

**4. Statistical – Possibilistic Model of Word Formation Process in Spanish Language.** *D. Giorgadze, N. Jorjiashvili. Proc.of Jav. TSU App. Math. and Inf. Sci., Vol. 340 (21), (2001). pp.29-32*

**5. The Certain Distribution of Planets on Heavenly Sphere at the moment of the Earthquake as a Triggering Effect (Combined Model).** *N. Jorjiashvili. Bull.of Geor. Acad.of Sci., 166, №1, 2002.*

**6. New General Characteristics of Word Syllabic Fuzzy Organization in Georgian Language.** *N. Jorjiashvili. Bull.of Geor. Acad. of Sci., 165. #3, 2002.*

**7. Fuzzy Analysis (image construction) of the Language Structure on the Finite Set of Insufficient Data.** *F.Criado, T.Gachechiladze, N.Jorjiashvili, T.Mandjaparashvili, H.Meladze,*

*G.Tsertsvadze, T.Tsilossani, G.Sirbiladze. Monograph at Piotrovsky 80<sup>th</sup> anniversary . Sankt-Peterburg. 2002.*

**8\*. Theory of Connectivity and Apportionment of Representative Activity Chains in the Problem of Decision-Making Concerning Earthquake Possibility.** *F.Criado, T.Gachechiladze, N.Jorjiashvili, Z.Khvedelidze, H.Meladze, G.Tsertsvadze, G.Sirbiladze. Int. J. of General Systems. vol. 32, №2, pp.103-121, (2003).*

**9\*. Fuzzy Analysis (image construction) of the Language Structure on the Finite Set of Insufficient Data.** *F.Criado, T.Gachechiladze, N.Jorjiashvili, T.Mandjaparashvili, H.Meladze, G.Tsertsvadze, T.Tsilossani, G.Sirbiladze. Journal of Quantitative Linguistics 11(1-2): 93-132 (2004)*

**10. Probability-possibility (combined) method of fuzzy image construction** *N.Jorjiashvili. Enlarged Session at I.Vekua Institute of Applied Mathematics (I.Javakhishvili Tbilisi State University). 23.06.2004.*

**11. Automation of digital seismological data processing using the methods of fuzzy analysis.** *J.Gachechiladze, T.Gachechiladze, H.Meladze, P.Tsereteli, N.Jorjiashvili, I.Amanatashvili. September 19-23, 2005, Yerevan, Armenia, pp.615-618.*

**12.Algorithm of numerical-tabular data-base compilation for digital seismic records discrimination analysis,** *J.Gachechiladze, T.Gachechiladze, N. Jorjiashvili, I.Amanatashvili, S.Khukhunaishvili, T.Mumladze, 2005, Proc. Tbilisi State Univer. Vol.24, pp. 111-120.*

**13. Handling Uncertainties in Seismic Hazard Assessment using Fuzzy Analysis.** *N.Jorjiashvili 2007. Bull.of IISSE. Vol.41, pp.1.*

**14. Seismicity and Rate changes in Caucasus Region.** *N.Jorjiashvili, Z.Javakhishvili and M.Elashvili. 2007. Conference commemorating the 50th Anniversary of the 1957 Gobi-Altay Earthquake, Extended Abstract volume. Ulaanbaatar, Mongolia .pp.77-80.*

**15. Seismic Hazard Assessment of Caucasus region,** 2007, Z.Javakhishvili, M.Elashvili, T.Godoladze, N.Jorjiashvili, *In the Atlas of GIS based maps of natural disaster hazards for the Sothern Caucasus, editor T.Chelidze, Tbilisi, 6-13.*

**16. Attenuation Relation and Development of Seismic Hazard of Caucasus Region** *N.Jorjiashvili, M. Elashvili, 2009, Ext.Abst. of JLG95.*

**17\*. Assessment of Uncertainties related to seismic hazard using fuzzy analysis.** *N.Jorjiashvili, T.Yokoi, Z.Javakhishvili. 2010. Natural Hazards. Natural Hazards. Vol.60, 501-515 .*

**18\*. Uncertainties in Teleseismic Earthquake Locations: Implications for Real- Time Loss Estimates**, 2010, M Wyss, G.Trendafiloski, M Elashvili, N.Jorjiashvili, and Z Javakhishvili, *BSSA*, v. 101; no. 3; p. 1152-1161.

**19\*. Coda Wave Attenuation for Three Regions of Georgia (Sakartvelo) using Local Earthquakes**, 2011, I. Shengelia, Z.Javakhishvili, and N.Jorjiashvili; *BSSA Volume 101-5*, October 2011.

**20\*. Non-extensive statistical analysis of seismicity in the area of Javakheti, Georgia**, 2011, T. Matcharashvili, T. Chelidze, Z. Javakhishvili, N. Jorjiashvili, U. Fra Paleo, *Computers & Geosciences*, Volume 37, Issue 10, Pages 1627-1632.

**21\*. Scaling Features of Ambient Noise at Different Levels of Local Seismic Activity: A Case Study for the Oni Seismic Station**, 2012, T. Matcharashvili, T. Chelidze, Z. Javakhishvili, N. Jorjiashvili, *Acta Geophysica*, vol.60, N3, pp. 809-832

**22\*. Discrimination between stochastic dynamics patterns of ambient noises (Case study for Oni seismic station)**, 2013, Matcharashvili, T., Chelidze, T., Javakhishvili, Z., Zhukova, N., Jorjiashvili, N. and Shengelia, I., *Acta Geophys.*, 61, 6, 1659-1676