## CURRICULUM VITAE

Personal information	
Name	Lidija Gorachinova-Ilieva
Address	Rudo 4 Shtip
Telephone	076 496 548
E-mail	l.goracinova@utms.edu.mk
Nationality	Macedonian
Date of birth	2.2.1971
Gender	Female
Academic Title	Full professor

Work experience	
• Dates (from – to)	8.9.2018 –
Name and address of employer	University of Tourism and Management Blvd. Partizanski odredi No 99, Skopje, Macedonia
• Type of business or sector	Higher education
Occupation or position held	Full professor (Mathematics and applied mathematics) Dean of Faculty of Informatics
Main activities and responsibilities	Scientific research, teaching, and applied activities Organizational activities
• Dates (from – to)	1.9.2021-31.12.2022
Name and address of employer	Mathematical-informatics gymnasium Blvd. Partizanski odredi No 91, Skopje
• Type of business or sector	Secondary education
<ul> <li>Occupation or position held</li> </ul>	Professor of Algebra
Main activities and responsibilities	Teaching
• Dates (from – to)	8.3.2011 - 7.9.2018
Name and address of employer	FON University Blvd. Kiro Gligorov No 5, Skopje
• Type of business or sector	Higher education
Occupation or position held	Associate professor; Full professor; Vice Rector
Main activities and responsibilities	Scientific research; Teaching; Management
• Dates (from – to)	1.10.2007 - 1.3.2011
Name and address of employer	University "Goce Delchev"
	Krste Misirkov No 10-A, P. O. 201 Shtip
Type of business or sector	Higher education

<ul> <li>Occupation or position held</li> </ul>	Assistant professor; Member of the Senate
Main activities and responsibilities	Scientific research; Teaching
• Dates (from – to)	5.2. 1997 - 30.9.2007
Name and address of employer	Ss. Cyril and Methodius University in Skopje, Faculty of Education "Goce Delchev" St. Goce Delchev nn, Shtip
• Type of business or sector	Higher education
Occupation or position held	Teaching assistant
Main activities and responsibilities	Teaching and research activities
• Dates (from – to)	1.9.1995 - 4.2.1997
Name and address of employer	STC "Dimitar Miraschiev" – Shtip
• Type of business or sector	Secondary education
<ul> <li>Occupation or position held</li> </ul>	Teacher of informatics
Main activities and responsibilities	Teaching

Education and training	
• Dates (from – to)	1.10.2003 - 10.7.2007
Name and type of organization providing education and training	Ss. Cyril and Methodius University in Skopje Faculty of Natural Sciences and Mathematics Institute of Mathematics
• Principal subjects/occupational skills covered	Universal Algebra Combinatorics
Title of qualification awarded	PhD in Mathematics Title of the PhD thesis: $(\kappa,n)$ -Algebras, quasigroups and designs
• Level in national classification (if appropriate)	VIII
D ( (C )	1.10.1000 21.12.2001
• Dates (from – to)	1.10.1998 - 21.12.2001
Name and type of organization providing education and training	Ss. Cyril and Methodius University in Skopje Faculty of Natural Sciences and Mathematics Institute of Mathematics
• Principal subjects/occupational skills covered	Algebra Mathematical analysis Topology
Title of qualification awarded	Master of Mathematics Title of the PhD thesis: Free groupoids
• Level in national classification (if appropriate)	VII A
• Dates (from – to)	1.10.1995 - 4.4.1996
Name and type of organization providing education and training	Ss. Cyril and Methodius University in Skopje Faculty of Philosophy Institute of Pedagogy

• Principal subjects/occupational	Pedagogy
skills covered	Psychology
	Methodology of teaching
Title of qualification awarded	Pedagogical additional qualification
• Level in national classification	VБ
(if appropriate)	
• Dates (from – to)	1.10.1989 - 30.4.1994
Name and type of organization	Ss. Cyril and Methodius University in Skopje
providing education and training	Faculty of Natural Sciences and Mathematics
	Institute of Informatics
• Principal subjects/occupational	Mathematics
skills covered	Algorithms
	Programming
Title of qualification awarded	Graduate engineer in mathematics-informatics
• Level in national classification	VI A
(if appropriate)	

International meeting and	
symposia	
2020, Skopje, Macedonia	CIIT 2020 – 17 <sup>th</sup> International Conference on Informatics and Information Technologies
2020, Skopje, Macedonia	The 7 <sup>th</sup> International Scientific Congress "Alternative paths for development of emerging economies in global business environment"
2016, Ohrid, Macedonia	VI Congress of Mathematicians of Macedonia
2015, Ohrid, Macedonia	LOOPS'15 The International Mathematical Conference on Quasigroups and Loops
2014, Olomouc, Czech Republic	12 <sup>th</sup> Biennial ISQA Conference Quantum Structures
2012, Ohrid, Macedonia	Fourth Conference for Information and Communication Technologies, ICT Innovations 2012 "Secure and Intelligent Systems"
2012, Dresden, Germany	AAA84 Workshop on General Algebra
2009, Ohrid, Macedonia	MASSEE, International Congress for Mathematics MICOM 2009
2008, Ohrid, Macedonia	Conference "85 years of life of Prof. Blagoj Popov"
2007, Prague, Czech Republic	Conference LOOPS'07
2006, Blagoevgrad, Bulgaria	Scientific Conference "Pedagogical Education in Bulgaria – conditions and tendencies"
2005, Novi Sad, Yougoslavia	Conference NSAC'05
2004, Podsdam, Germany	AAA67 Workshop on General Algebra
2004, Sofia, Bulgaria	Scientific Conference "Higher Pedagogical Education – problems, achievements, tendencies"
2003, Montreal, Canada	Seminar for Structural theory of authomata, semigroups and universal algebra
2001, Darmshtaad, Germany	AAA61Workshop on General Algebra
2001, Bansko, Bulgaria	6 <sup>th</sup> International Conference on Discrete Mathematics and Applications
2001, Belgrade, Yougoslavia	10 <sup>th</sup> Congress of the Mathematicians of Yougoslavia
2000, Ohrid Macedonia	2 <sup>nd</sup> Congress of the Union of Mathematicians and Informaticians of Macedonia

Publications	
2022	B. Zlatanovska, L. Gorachinova-Ilieva, L. Koceva Lazarova, M. Miteva, <i>Mathematics 1 for technical faculties</i> , UGD
2021	B. Sitnikovski, L. Gorachinova-Ilieva, B. Stojcevska, <i>Models for software verification: Proving program correctness</i> , UTMS Journal of Economics, Vol.12, N <sub>0</sub> 1 (2021), 32-39.
2020	B. Sitnikovski, B. Stojchevska, L. Gorachinova-Ilieva, I. Stojmenovska, <i>PubSub implementation in Haskell with formal verification in Coq</i> , CIIT 2020, Proceedings of the 17 <sup>th</sup> International Conference for Informatics and Information Technologies (2020), 181-184.
2019	L. Gorachinova-Ilieva, B. Zlatanovska, L. Koceva Lazarova: Exercises from Mathematics 1 for technical faculties, UGD
2016	L. Gorachinova-Ilieva, S.Markovski, Construction of Mendelsohn designs by using quasigroups of (2,q)-varieties, Commentationes Mathematicae Universitatis Carolinae, 57, 4 (2016), 501-514.
2016	L.Gorachinova-Ilieva, E.Spasova Kamcheva, <i>Algebraic representation of a class of homogenous Steiner quadruple systems</i> , Bulletin Mathématique, Vol.40 (LXVI), N <sub>0</sub> 3 (2016), 51-59.
2016	K. Jakimoski, S. Arsenovski, L. Gorachinova, S. Chungurski, O. Iliev, L. Djinevski and E. Kamcheva, <i>Evaluation of Caching Techniques for Video on Demand in Named Data Networks</i> , Proc. of The 39 <sup>th</sup> International ICT Convention-MIPRO 2016, 388-392.
2016	E. Spasova Kamcheva, L. Gorachinova-Ilieva, <i>One application of mathematical modelling on adaptive e-learning system</i> , KNOWLEDGE International journal scientific papers, Vol.12.2 (2016), 291-296.
2016	E. Spasova Kamcheva, L. Gorachinova-Ilieva, <i>Adaptive model for discrete math of the e-learning system</i> , VISIONS, No. 25 (2016), 405-411.
2016	K. Jakimoski, S. Arsenovski, L. Gorachinova, S. Chungurski, O. Iliev, L. Djinevski and E. Kamcheva, <i>Measurements of Available Bandwidth in Computer Networks</i> , International Journal of Grid and Distributed Computing, Vol. 9, No. 4 (2016), 201-210.
2016	K. Jakimoski, S. Chungurski, S. Arsenovski, L. Gorachinova, O. Iliev, L. Djinevski and E. Kamcheva, <i>Performance Analysis of Linux-Based TCP Congestion Control Algorithms in VANET Environment</i> , International Journal of Future Generation Communication and Networking, Vol. 9, No. 4 (2016), 17-26.
2014	B.Demir, Z.Gacovski, V.Pivovarov, L.Gorachinova: <i>System for Detection of Network Threats based on Classifiers</i> , TEM Journal, Vol.3, No 2 (2014), 120-126.
2014	B. Zlatanovska, L. Gorachinova-Ilieva, L. Lazarova: <i>Mathematics 1 for the students of technical faculties</i> , peer-reviewed script, FON University, Skopje
2013	V. Angelkoska, L. Gorachinova-Ilieva: Statistical Education of the Students in Macedonia, Quality of Learning and Teaching Conference Proceedings (2013), 88-95.
2010	L. Gorachinova-Ilieva: Lecture Notes on Information Theory, script for internal use
2008	L. Gorachinova-Ilieva: <i>The role of the teacher in mathematics education</i> ,  Proceedings of the Scientific Conference "Contemporary tendencies in teaching"
2008	L. Gorachinova-Ilieva: <i>Norms of evaluation in the teaching of mathematics</i> , Education, year 5 no. 8-9, Pedagogical Faculty "Goce Delchev"-Shtip (2008), 55-58.
2007	L.Gorachinova-Ilieva: <i>Geometry in the development of deduction abilities</i> , Proc. of 4-th Balcan Congress, Education, the Balcans, Europe, 22-24 June 2007, Trakia University, Faculty of Education, Stara Zagora, Bulgaria, vol. 2 (2007), 267-272.

2007	L.Gorachinova-Ilieva, S.Markovski: <i>Constructions of (2,n)-varieties of groupoids</i> for $n=7$ , 8, and 9, Publications de l'InstituteMathematique, Nouvelle serie 81 (95) (2007), 111-117.
2007	L.Gorachinova-Ilieva: (k,n)-Алгебри, квазигрупи и дизајни, Doctoral dissertation
2006	L. Gorachinova-Ilieva: Some current problems of the teachers at the pedagogical faculties in the Republic of Macedonia and the need to redesign the new study programs, Proceedings of the Jubilee Scientific Conference "Pedagogical Education in Bulgaria - Situations and Tendencies", 27-28.10.2006.
2006	L.Gorachinova-Ilieva: A note on orthogonality of the quasigroups arising from some perfect m-cycle systems, Bulletin Mathématique 30 (LVI) (2006), 5-8.
2006	L.Gorachinova-Ilieva: <i>Non-existence of (2,6)-manifolds of quasigroups</i> , Annual Proceedings of PF "Goce Delchev"-Shtip 5-6 (2006), 112-118.
2006	L.Gorachinova-Ilieva: Competencies in the development of the study programs of the pedagogical faculties, Education, no. 6-7, Pedagogical Faculty "Goce Delchev"-Shtip (2006),164-168.
2005	L.Gorachinova-Ilieva, E. Petrova-Gorgeva: <i>Implications of the national program for the development of education in R. Macedonia 2005-2015 on the development directions of the pedagogical faculties</i> , Proceedings from the conference "Higher pedagogical education - problems, achievements, tendencies", Sofia, 23-24.11.2004, 345-349.
2004	L. Gorachinova-Ilieva, S. Markovski, A. Sokolova: <i>On groupoids with the identity</i> $x(xy)=y$ , Quasigroups and related systems 11 (2004), 39-54.
2004	L.Gorachinova-Ilieva: Construction of free groupoids with a chain of partial groupoids: free Steinov groupoid, Annual Proceedings of the Pedagogical Faculty "Goce Delchev"-Shtip, 3-4 (2003/2004), 57-66.
2002	L. Gorachinova-Ilieva: <i>Magic squares</i> , Education, Year. II, No. 3, Pedagogical Faculty "Goce Delchev" - Shtip (2002), 92-108.
2002	S. Markovski, L. Gorachinova-Ilieva: <i>Approaches to the problem of constructing free algebras</i> , Proc. of the Sixth International Conference of Discrete Mathematics and Applications, 31.08-02.09.2001, Bansko, Bulgaria, 109-117.
2001	L. Gorachinova-Ilieva: Free groupoids, master thesis
2001	L. Gorachinova-Ilieva: <i>Free groupoids and methods of their construction</i> , Annual Proceedings of PF "Goce Delchev"-Shtip 1 (2001), 235-245.
2001	S. Markovski, L. Gorachinova-Ilieva, A. Sokolova: <i>Free groupoids with the identity (xy)y=yx</i> , Proc. of the 10 <sup>th</sup> Congress of Yougoslav Mathematicians, Belgrade, 21-24.01.2001, 173-176.
2001	S. Markovski, A. Sokolova, L. Gorachinova-Ilieva: <i>On semigroups defined by the identity xxy</i> = <i>y</i> , Publication de l'Institut Mathematique, Nouvelle series, tome 70(84) (2001), 1-8.
2001	S. Markovski, A. Sokolova, L. Gorachinova-Ilieva: <i>On the functional equation</i> $A(x,B(x,y))=y$ <i>in the variety of grupoids</i> , On Tribute to S.B.Presic, Papers Celebrating his 65 <sup>th</sup> Birthday, A.Krapez Ed., Beograd (2001), 84-88.