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Lela Mirtskhulava

Experience

- 2009-2011 Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, Invited Lecturer, Faculty of Exact and Natural Sciences, Department of Computer Sciences.
- 2011-present Iv. Javakhishvili Tbilisi State University, Tbilisi, Georgia, Associate Professor, Faculty of Exact and Natural Sciences, Department of Computer Sciences
- San Diego State University, San Diego, CA, Invited Scholar, Department of Computer Science
- Westsaxson University of Applied Sciences Zwickau, Zwickau, Germany, Faculty of Informatics Physics, Invited Scholar
- 2015 2017 International Black Sea University, Tbilisi, Georgia, Associate Professor/CTE Faculty Quality Assurance Manager/Informatics Program Coordinator
- 2000 2013 Geocell LLC, Teliasonera Group, Senior Engineer, Department of Information and Communication Technologies
- 2013 University of Cambridge, Cambridge, United Kingdom, Invited Professor, Computer Laboratory.
- 2006 2009 Sokhumi State University, Tbilisi, Georgia, Associate Professor, Faculty of Exact and Natural Sciences
- 1998 2006 Georgian Technical University, Tbilisi, Georgia, Associate Professor, Faculty of Informatics and Control Systems, Department of Informatics
- 1998 2000 Telecommunications Scientific Research Institute "Egrisi", Head of Division, Division of Computer Networks

Education

- Georgian Technical University, Tbilisi, Georgia. Faculty of Informatics and Control Systems. PhD in Computer Systems, Networks and Complexes
- 1985 -1990 Moscow Engineering Physics Institute, Moscow, Russia, Faculty of Automatics and Electronics
- 1990 1992 Kutaisi Technical University, Kutaisi, Georgia, Faculty of Informatics and Automatics

Research Interests

- 1. Smart IoT;
- 2. AI diagnostic in Stroke Treatment;

- 3. Network Security;
- 4. Hidden Markov models
- 5. Queuing Systems,
- 6. Energy Efficient Data Center Networking
- 7. Power Consumption of Smartphones
- 8. Intelligent Cities

Teaching Courses

- 1. Computer Architecture and Organization
- 2. Networking Technologies and Communications
- 3. System Administration and Management
- 4. Networking Technologies and Communications (Wireless Technologies)

Performed Selected Projects

 2014 – 2018 FR/312/4-150/14 - Mixed types of Markovian and Semi-Markovian Queuing Systems for Dependability Planning of Infocommunication Networks (Supported by Shota Rustaveli National Science Foundation) – Main staff

Selected Publications

Book Chapters

- 1. Lela Mirtskhulava, Giorgi Gugunashvili and Mzia Kiknadze. Erlang Distribution and Exponential Distribution Models in Wireless Networks. Transactions on Engineering Technologies, 2014. Chapter 42. Springer. Netherlands. p. 563-577. 2014/1/1
- 2. L. Mirtskhulava, C. Mert, Z. Tsiramua and G. Gugunashvili. The methods of Power Consumption Measurement in Smartphones. Nova science Publishers. Chapter 20. **ISBN:** 978-1-53612-075-2. 2017

International Conference and Journal Papers

- Azamat Zhamanov, Lela Mirtskhulava, Zhulduz Sakhiyeva, Meirambek Zhaparov.
 Implementation of Flipped Classroom as Element of IoT into Learning Process of Computer Networks Subject in Suleyman Demirel University. Journal of Technical Science & Technologies; ISSN: 2298-0032; e-ISSN: 2346-8270; Volume 6, Issue 1, 2017.
- 2. Jalal Karam, Salah Al Majeed, Christofer N. Yalung, Selivia, JR, Lela Mirtskhulava. Propagation Delay Reduction for Standard Cell Library Migration. ACM Digital Library. 2017 to appear
- 3. Jalal Karam, Salah Al Majeed, Christofer N Yalung, Lela Mirtskhulava. Neural Network for Recognition of Brain Wave Signals. International Journal of Enhanced Research in Science, Technology & Engineering. ER Publications 2016.
- 4. Christofer Yalung, Salah Al Majeed, Cid Mathew Adolfo, Jalal Karam, Lela Mirtskhulava. Gyroscope explorer terrain angles classification. 2016. IEEE Xplore Digital Library
- L. Mirtskhulava, C. Mert, Z. Tsiramua, and G. Gugunashvili. The Methods of Power Consumption Measurements in Smartphones. Proceedings of International Scientific Conference Dedicated to Academician Iveri Prangishvili's 85th Anniversary "Information and Computer Technologies, Modelling, Control". November 3-5, 2015, Tbilisi, Georgia.
- **6.** Lela Mirtskhulava, The role of Mobile Computing in Climate Protection. The first SDSU-Georgia STEM Workshop on Nanotechnology and Environmental Sciences. September 4-5 2015, Tbilisi, Georgia.

- 7. Lela Mirtskhulava, Salah Al-Majeed, Reliability Prediction Modelling for Wireless Communication Networks. Conference: ICCIT 2015 The Fourth International Conference on Communications and Information Technology, At Abu Dahbi, UAE
- 8. Lela Mirtskhulava, Julian Wong, Gillian Pearce, Salah Al-Majeed. Artificial Neural Network Model in Stroke Diagnosis. DOI: 10.1109/UKSim.2015.33 Conference: 2015 17th UKSIM-AMSS International Conference on Modelling and Simulation, At Cambridge, UK
- Gillian Pearce, Lela Mirtskhulava, Julian Wong, Salah Al-Majeed, Koba Bakuria, Nana Gulua. DOI: 10.1109/UKSim.2015.34 Conference: 2015 17th UKSIM-AMSS International Conference on Modelling and Simulation, At Cambridge, UK
- 10. Salah Al-Majeed, Lela Mirtskhulava, Gillian Pearce, Mohamed Al-Mulla and Julian Wong. Blood Clotting Analysis Based Neural Networks Modeling and Sensors Measurement. 2014 Annual International Conference on Biologically Inspired Cognitive Architectures (BICA 2014). Fifth Annual Meeting of the BICA Society. November 7-9 (Friday-Sunday): Massachusetts Institute of Technology, Cambridge, MA
- 11. Lela Mirtskhulava, Salah Al-Majeed, Gillian Pearce, Tamar Gogoladze, Ivane Javakhishvili. GESJ: Computer Science and Telecommunications 2014| No. 3(43). Reviewed Electronic Scientific journal. http://gesj.internet-academy.org.ge/en/list_artic_en.php?b_sec=comp
- 12. Lela Mirtskhulava, Natela Ananiashvili, and Giorgi Gugunashvili. On the Modeling of Wireless Communication Networks. International Journal of Computer, Systems and Control Engineering Vol.:8, No:6, 2014.
- 13. Lela Mirtskhulava, Mariam Khunjgurua, Nino Lomineishvili. Software Reliability Prediction Model Analysis. ICSCE 2014: International Conference on Software and Computer Engineering. London, United Kingdom. June 29-30, 2014.
- 14. Lela Mirtskhulava, Revaz Kakubava, Natela Ananiashvili, and Giorgi Gugunashvili. Internet Reliability and Availability Analysis Using Markov Method. UKSim-AMSS 16th International Conference on Computer Modeling and Simulation. Cambridge, United Kingdom 26-28 March 2014. UKSim2014. http://uksim2014.info/
- 15. L. Mirtskhulava, member of IAENG, G.Gugunashvili, M. Kiknadze. Modeling of Wireless Networks as Queuing System. World Congress on Engineering and Computer Science 2013. San Francisco, UC, Berkeley. USA, 23-25 October, 2013.
- **16.**Lela Mirtskhulava. Mathematical model of Prediction of Reliability of Wireless Communication Networks UKSim 2013. UKSim-AMSS 15th International Conference on Computer Modeling and Simulation. Cambridge, United Kingdom 10-12 April 2013. IEEE Xplore Digital Library. 677-680 pp. ISBN: 978-1-4673-6421-8.