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## Liana Lortkipanidze

### Experience

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- 1976-1980 Department of Autoimmunization Systems of Archil Eliashvili Institute of Control Systems Georgian Academy of Sciences, Programmer
- 1980-1996 Thematic expedition of Tbilisi Geological Management, Engineer-programmer
- 1996-2006 Department of Language and Speech Modelling LEPL Archil Eliashvili Institute of Control Systems, Scientific collaborator
- 2004-2009 Department of Control and Autoimmunization of Tbilisi Technical University, Invite Lector
- 2006-2014 Department of Language and Speech Systems of LEPL Archil Eliashvili Institute of Control Systems, senior researcher
- 2009-2010 Direction of computation sciences Faculty of Exact and Natural Sciences, Ivane Javakhishvili Tbilisi State University, Invite Lector
- 2011-2016 Department of the Computational Processing of Linguistic Data of Arnold Chikobava Institute of Linguistics, Chief scientific worker
- 2014-2018 Department of Language and Speech Systems of Archil Eliashvili Institute of Control Systems Georgian Technical University, Chief scientific worker
- From 2012 Department of Language and Speech Systems of Archil Eliashvili Institute of Control Systems Georgian Technical University, Chief of department
- From 2010 Direction of computation sciences Faculty of Exact and Natural Sciences, Ivane Javakhishvili Tbilisi State University, Assistant professor

### Education

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- 1971-1976 Tbilisi State University Faculty of Physics, Master's degree in nuclear physics of high energy

### Research Interests

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1. Programming Languages;
2. Computational Linguistics;
3. Language Processors and there computer implementation;
4. Knowledge accumulation automatic systems and there computer implementation;
5. Representation of Linguistic Knowledge by the data base;
6. Automatic systems of support of linguistic development;

7. Computer support of textual corpus and manager of corpus.

### **Teaching Courses**

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Basics of Programming  
Programming on C++ object orientated language  
Corpus Linguistics  
Computational Linguistics

### **Performed Selected Projects**

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- 2015-2016 Georgian Word Net Compiler – GeWordNet. (Shota Rustaveli National Science Foundation #AR/84/4-105/14)
- 2012-2015 The Georgian National Corpus - creation of technological basis (Volkswagen Foundation, AZ 86154)
- 2013-2015 The Full (Morphological, Syntactical, Semantical) Annotation System of Georgian Language Corpora, Shota Rustaveli National Science Foundation # 31/65)
- 2013-2014 The Linguistic Portrait of Georgia III \_ Morphological Annotation in Georgian Dialect Corpus and Creating a Large Dialect lexicographic database. Shota Rustaveli National Science Foundation # 39/67)

### **Publications from the past five years**

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1. Lortkipanidze L., Amirezashvili N., Samsonadze L.: Modeling of derivation in the Multilingual Expert Systems. Proceedings of the LEPL Archil Eliashvili Institute of Control Systems 12, 2008, pp. 176-181.
2. Lortkipanidze L.: Recognition of Language Morphological Characteristics' Patterns. Proceedings of the LEPL Archil Eliashvili Institute of Control Systems 12, 2008, pp. 169-175.
3. Lortkipanidze L.: The Computer Realization of Applied Dictionaries of "Computer Prompter" for Georgian Language Proceedings of the LEPL Archil Eliashvili Institute of Control Systems 13, 2009, pp. 154-161
4. Lortkipanidze L.: Realization of Structure of Morphological Zone of Computer-Explanatory Dictionary Proceedings of the LEPL Archil Eliashvili Institute of Control Systems 13, 2009, pp. 162-166
5. Lortkipanidze L.: Interactive System for Compilation of Multilingual Concordancers Dictionary Proceedings of the LEPL Archil Eliashvili Institute of Control Systems 14, 2010, pp. 188-192.
6. Lortkipanidze L.: Software Tools for Morphological Annotation of Corpus. Proceedings of the International Conference "Corpus Linguistics – 2011". St. Petersburg. pp. 243 – 248.
7. Lortkipanidze L.: The Information Preparation Technology for Georgian Corpus. Proceedings of the LEPL Archil Eliashvili Institute of Control Systems 15, 2011, pp. 192-198.
8. Lortkipanidze L., Samsonadze L.: The Computer Communication System for Persons With Special Needs. Proceedings of the Archil Eliashvili Institute of Control Systems of the Georgian Technical University 16, 2012, pp. 166-170.
9. Lortkipanidze L., Samsonadze L.: The Computer Communication System for Persons With Special Needs. Proceedings of the Archil Eliashvili Institute of Control Systems of the Georgian Technical University 16, 2012, pp. 166-170.

10. Lortkipanidze L., Javashvili N.: International Standart “EAGLES” for Annotation of A Georgian Text Corpus. Proceedings of the Archil Eliashvili Institute of Control Systems of the Georgian Technical University 17, 2013, pp. 118-130.
11. Lortkipanidze L. : Computer Linguistics in the Institute of Control System (History and Perspectives). Georgian Parliament conference - 21 Century Challenges. Kutaisi, 2013.
12. Lortkipanidze L., Beridze M., Nadaraia D.: Lexicographic conception of Georgian dialect corpus and morphological annotation. Papers of the VII International Scientific Conference "Applied Linguistics in science and education", St. Petersburg, Russia 10 - 12 April, 2014.
13. Lortkipanidze L., Eremian R.: Developing of the Manager of Georgian literary text corpus. Papers of the International Scientific Conference “Contrastive Research and Applied Linguistics”. 2014 Juny.
14. Lortkipanidze L., Chikoidze G., Javashvili N.: Computer Linguistics and Language Modeling. Proceedings of the Archil Eliashvili Institute of Control Systems of the Georgian Technical University 18 2014. Pp. 118.
15. Lortkipanidze L.: The model of the automatic removal of homonymy in the corpora. Proceedings of the Archil Eliashvili Institute of Control Systems of the Georgian Technical University 19, 2015, pp.
16. Beridze M., Kikvidze Z., Lortkipanidze L.: Georgian Corpus of Linguistic Meta-Language: Problems and Prospects. Papers of the International Scientific Conference “Contrastive Research and Applied Linguistics”. Belarus, Minsk, 2014.
17. Liana Lortkipanidze, Nana Odishelidze, Ketevan Kuthashvili, Liana Karalashvili. On Multicriteria Algorithm for Specific Problem of Scheduling Theory. GESJ: Computer Science and Telecommunications 2014|No.3(43)
18. Beridze M., Lortkipanidze L., Nadaraia D.: The Georgian Dialect Corpus: Problems and Prospects. "Historical Corpora. Challenges and Perspectives". Narr Francke Attempto Verlag GmbH & Co. KG • editorial department Tillmann Bub Dischinger Weg 5, 72070 Tübingen, Jost Gippert / Ralf Gehrke (eds.) (= CLIP, Vol. 5), 2015
19. Lortkipanidze L., Beridze M., Nadaraia D.: Dialect Dictionaries with the Functions of Representativeness and Morphological Annotation in Georgian Dialect Corpus. Theoretical Computer Science and General Issues. 10th International Tbilisi Symposium on Logic, Language, and Computation, TbiLLC 2013, Gudauri, Georgia, September 23-27, 2013, Revised Selected Papers. Publisher: Springer-Verlag Berlin Heidelberg, 2015.
20. Lortkipanidze L.: Vector space model and Georgian text processing. Proceedings of the Archil Eliashvili Institute of Control Systems of the Georgian Technical University 19, 2015, pp.
21. Chikoidze G., Amirezashvili N., Lortkipanidze L., Samsonadze L., Chutkerashvili A., Javashvili N.: The Contribution of Lexical Functions in an Explanatory-combinatorial Dictionary. Proceedings of the Archil Eliashvili Institute of Control Systems of the Georgian Technical University 19, 2015, pp.
22. Chikoidze G., Lortkipanidze L.: The Algorithm and Program Realization of the Automatic Formation of Hyponymy Tree in Accordance with the Structure of Thesaurus WordNet. Proceedings of the Archil Eliashvili Institute of Control Systems of the Georgian Technical University 20, 2016.
23. Chikoidze G., Lortkipanidze L.: The Lexical Ontology of GeWordNet. Proceedings of the Archil Eliashvili Institute of Control Systems of the Georgian Technical University 20, 2016.
24. Amirezashvili N., Lortkipanidze L., Javashvili N.: Lexical model of Georgian language – GeWordNet. Journal of the Georgian Technical University “Ganatleba” №3(14), 2016.
25. Lortkipanidze L., Amirezashvili N., Chutkerashvili A., Javashvili N., Samsonadze L.: Syntax Annotation of the Georgian Literary Corpus. Theoretical Computer Science and General Issues. 11th International Tbilisi Symposium on Logic, Language, and Computation, TbiLLC 2015, Tbilisi, Georgia, 21-26 September, 2015, Revised Selected Papers. Publisher: Springer-Verlag Berlin Heidelberg, 2017

26. Lortkipanidze L.: Morphological Analyser of Kartvelian Languages (in georgian) Proceedings of the Archil Eliashvili Institute of Control Systems of the Georgian Technical University 21, Tbilisi "Poligrafia", 2017.
27. Lortkipanidze L., Kloyan L., Kloyan M.: The Georgian Text Corpora. (in georgian) Proceedings of the Archil Eliashvili Institute of Control Systems of the Georgian Technical University 21, Tbilisi "Poligrafia", 2017.
28. Lortkipanidze L., Javashvili N., Chutkerashvili A., Aidarashvili G. Bidirectional Georgian-English Automatic Translation of Derivative Forms (in russian) Proceedings of the Archil Eliashvili Institute of Control Systems of the Georgian Technical University 22, Tbilisi "Poligrafia", 2018.