

# Curriculum Vitae

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Full Name: Aleksandre Maskharashvili  
email: alexandermaskharashvili@gmail.com  
Position: Assistant Professor (tenure track) in the Department of Linguistics at University of Illinois Urbana-Champaign.

## Education

**Ph.D.** 01.11.2012 – 01.12.2016

Department of Mathematics and Computer Science, **University of Lorraine**, Nancy, France

- Thesis Title: *Discourse Modeling with Abstract Categorical Grammars*
- Advisors: Philippe de Groote, Ph.D. and Sylvain Pogodalla, Ph.D.

**M.S.** February 2014

**European Masters Program in Language and Communication Technologies:**

**2010 Sept.–2011 July** Master Program in “Traitement Automatique des Langues,” University of Nancy 2, Nancy, France

**2011 Sept.–2014 Feb.** Master Program in Human Language Science and Technology, University of Malta, Msida, Malta

- Thesis Title: *About the Contracting Symbols in Georgian and in Some Other Languages and their Applications*
- Advisor: Ray Fabri, Ph.D.

**M.S.** July 2010

**Master Program in Mathematics (2008-2010):**

2008 Sept.–2010 July: Faculty of Exact and Natural Sciences at Iv. Javakhishvili Tbilisi State University

- Thesis Title: *Mathematical Analysis of Georgian Verbs with Active Person and the First Version of Georgian Intellectual Computer System*
- Advisor: Konstantine Pkhakadze, Ph.D.

**B.S.** July 2008

**Bachelor Program in Mathematics (2004 Sept.–2008 July):**

**Iv. Javakhishvili Tbilisi State University**, Tbilisi, Georgia

- Thesis title: *Mathematical Analysis of Some Complex Sentences of the Georgian Language*
- Advisor: Konstantine Pkhakadze, Ph.D

## Work Experience

- University of Illinois at Urbana-Champaign November 2023 — (Position: Assistant Professor)
- The Ohio State University, United States 15.08.2022 — 14.08.2023 (Position: Visiting Assistant Professor)
- The Ohio State University, United States 12.01.2019 — 14.08.2022 (Position: Postdoctoral Researcher)
- University of Gothenburg, Sweden 01.15.2018 — 10.30.2019 (Position: Postdoctoral Researcher)
- INRIA Nancy Grand Est, France 01.10.2012 — 30.04.2016 (Position: Doctoral Researcher)
- St. Andrew University, Georgia 01.03.2009 — 31.12.2009 (Position: Researcher)

## Research Experience

- Project: Structure in Neural Natural Language Generation  
PI: Michael White  
Duration: 11.01.2019–  
Position: Postdoctoral Researcher
- Project: Centre for linguistic theory and studies in probability (CLASP)  
PI: Shalom Lappin  
Duration: 01.09.2015–01.09.2025  
Position: Postdoctoral Researcher

- Project: Parsing and synthesis with abstract categorial grammars. From lexicon to discourse (Polymnie)  
PI: Sylvain Pogodalla  
Duration: 01.11.2012—29.02.2016  
Position: PhD Student

- Project: Foundations of the Mathematical theory of the Georgian Language and Thinking and Sub-systems of the 1<sup>st</sup> Version of the Voice Managed Georgian Intellectual Computer System  
PI: Konstantine Pkhakadze  
Duration: 01.03.2009 — 31.12.2009  
Position: Researcher

#### Teaching

- Instructor for “Technical Tools for Linguists” at The Ohio State University, the May Term 2023 (the consists of 20 day lectures)
- Instructor for “Linguistic Meaning (Formal Semantics)” at The Ohio State University, Spring 2023
- Instructor for “Codes and Codebreaking” at The Ohio State University, Autumn 2022 and Spring 2023
- Organizer (the main instructor) of the course “Introduction to Formal Linguistics” for Master in Language Technology (MLT) of the University of Gothenburg Duration: First Semester of 2018-2019
- Invited lecturer at First Tbilisi International Summer School in Logic, Language, Artificial Intelligence, September 2019  
Course title: “Syntax-Semantics Interface for Natural Language” Duration: 3 days
- Lecturer at 32nd European Summer School in Logic, Language and Information, August 2021  
Course title: “Probabilistic Semantics and Inference Under Uncertainty in Natural Language” (organized jointly with Jean-Philippe Bernardy)  
Duration: 5 days

#### Student Advising

2017–2020

Foreign-consultant (external supervisor) of Shalva Malidze in his doctoral studies, supervised by Prof. Konstantine Pkhakadze, the Department of Artificial Intelligence, the Georgian Technical University.

#### Awards

- 2020 : Qualification MCF in Linguistics (qualified to apply for assistant/associate professor positions in Linguistics in French universities)
- 2006 : Iv. Javakhishvili Tbilisi State University Student Conference — 3<sup>rd</sup> place
- 2009 : Iv. Javakhishvili Tbilisi State University Student Conference — 2<sup>nd</sup> place
- 2004-2008: Iv. Javakhishvili Tbilisi State University scholarship for excellent undergraduate records
- 2008-2010: Iv. Javakhishvili Tbilisi State University scholarship for excellent graduate records
- 2010-2012: Erasmus Mundus Scholarship

#### Languages

Georgian (mother tongue), English (fluent), Russian (fluent), French (intermediate), Latin (beginner)

#### Technical Skills

##### Operating Systems

- Linux, Mac OSX, Microsoft Windows XP/7

##### Programming Languages

- Python (Advanced), Java (Good), Bash, AWK, Sed, Prolog (university grade A), OCAML (basic), Haskell (university grade A), HTML

#### Doctoral Thesis

Aleksandre Maskharashvili “Discourse Modeling with Abstract Categorial Grammars,” supervised by Philippe de Groote and Sylvain Pogodalla, University of Lorraine, defended on 01.12.2016

<https://hal.inria.fr/tel-01412765>

#### Books

Jean-Philippe Bernardy, Rasmus Blank, Stergios Chatzikyriakidis, Shalom Lappin and Aleksandre Maskharashvili (eds.) “Probabilistic Approaches to Linguistic Theory,” *CSLI publications*.

<https://press.uchicago.edu/ucp/books/book/distributed/P/bo198661279.html>

Publications (Journal  
Articles, Book  
Chapters, and  
Conference Papers)

1. Symon Jory Stevens-Guille, Aleksandre Maskharashvili, Xintong Li, and Michael White “Generating Discourse Connectives with Pre-trained Language Models: Conditioning on Discourse Relations Helps Reconstruct the PDTB” *Proceedings of the 23rd Annual Meeting of the Special Interest Group on Discourse and Dialogue (SIGDIAL 2022)*, pp. 500–515, Edinburgh, UK (2022)
2. Jean-Philippe Bernardy, Rasmus Blanck, Stergios Chatzikiyiakidis, Shalom Lappin, Aleksandre Maskharashvili “Bayesian Inference Semantics for Natural Language” in *Probabilistic Approaches to Linguistic Theory*, Jean-Philippe Bernardy, Rasmus Blanck, Stergios Chatzikiyiakidis, Shalom Lappin, Aleksandre Maskharashvili (eds.). 2022, CSLI Publications
3. Aleksandre Maskharashvili, Symon Jory Stevens-Guille, Xintong Li, and Michael White “Neural Methodius Revisited: Do Discourse Relations Help with Pre-Trained Models Too?” *Proceedings of the 14th International Conference on Natural Language Generation*, pp. 12–23, Aberdeen, United Kingdom (2021)
4. Xintong Li, Symon Jory Stevens-Guille, Aleksandre Maskharashvili, and Michael White “Self-Training for Compositional Neural NLG in Task-Oriented Dialogue” *Proceedings of the 14th International Conference on Natural Language Generation*, pp. 87–102, Aberdeen, United Kingdom (2021)
5. Aleksandre Maskharashvili, *The Syntax-Semantics Interface: From Montague Grammar to Today*, Applied Mathematics, Informatics, and Mechanics (AMIM), Vol.25 No.2, pp. 94–112, Tbilisi, Georgia (2020)  
[http://www.viam.science.tsu.ge/Ami/2020\\_2/7\\_sandro.pdf](http://www.viam.science.tsu.ge/Ami/2020_2/7_sandro.pdf)
6. Jean-Philippe Bernardy, Rasmus Blanck, and Aleksandre Maskharashvili, *A Logic with Measurable Spaces for Natural Language Semantics*, Applied Mathematics, Informatics, and Mechanics (AMIM), Vol.25 No.2, pp. 31–44, Tbilisi, Georgia (2020)  
[http://www.viam.science.tsu.ge/Ami/2020\\_2/3\\_Bernardy.pdf](http://www.viam.science.tsu.ge/Ami/2020_2/3_Bernardy.pdf)
7. Symon Jory Stevens-Guille, Aleksandre Maskharashvili, Amy Isard, Xintong Li, and Michael White “Neural NLG for Methodius: From RST Meaning Representations to Texts” *Proceedings of the 13th International Conference on Natural Language Generation*, pp. 306–315, Dublin, Ireland (2020)  
<https://www.aclweb.org/anthology/2020.inlg-1.37.pdf>
8. Xintong Li, Aleksandre Maskharashvili, Symon Jory Stevens-Guille, and Michael White “Leveraging Large Pretrained Models for WebNLG 2020”, *Proceedings of the 3rd International Workshop on Natural Language Generation from the Semantic Web (WebNLG+)*, pp. 117–124, Dublin, Ireland (2020)
9. Jean-Philippe Bernardy, Stergios Chatzikiyiakidis, and Aleksandre Maskharashvili “A Computational Treatment of Anaphora and its Algorithmic Implementation”, *Journal of Logic Language and Information*, Journal of Logic, Language and Information (2021) 30:1–29
10. Rasmus Blank and Aleksandre Maskharashvili “From Tree Adjoining Grammars to Higher Order Representations of Abstract Meaning Representations via Abstract Categorical Grammars,” a book chapter in *Logic and Algorithms in Computational Linguistics 2018*, Springer book series: Studies in Computational Intelligence (SCI) 2020, pages 67–92
11. Jean-Philippe Bernardy, Rasmus Blank, and Aleksandre Maskharashvili “A Logic with Measurable Spaces for Natural Language Semantics” *TbiLLC 2019: Thirteenth International Tbilisi Symposium on Language, Logic and Computation, 16-20 September 2019*  
[http://events.illc.uva.nl/Tbilisi/Tbilisi2019/uploaded\\_files/inlineitem/Bernardy.pdf](http://events.illc.uva.nl/Tbilisi/Tbilisi2019/uploaded_files/inlineitem/Bernardy.pdf)
12. Jean-Philippe Bernardy and Aleksandre Maskharashvili “Two experiments for embedding Wordnet hierarchy into vector spaces,” *Proceedings of the 10th Global WordNet Conferences (GWC2019)*, July 23–27, 2019, Wroclaw, Poland
13. Jean-Philippe Bernardy, Rasmus Blank, Stergios Chatzikiyiakidis, Shalom Lappin and Aleksandre Maskharashvili “Bayesian Inference Semantics: A Modelling System and A Test Suite,” *Proceedings The Eighth Joint Conference on Lexical and Computational Semantics (StarSem2019)*, June 6-7, 2019, Minneapolis, USA  
<https://www.aclweb.org/anthology/S19-1029.pdf>
14. Rasmus Blank and Aleksandre Maskharashvili “From TAG to HOL Representations of AMRs via ACGs ,” *Proceedings of the Symposium on Logic and Algorithms in Computational Linguistics 2018 (LACompLing2018)*  
[staff.math.su.se/rloukanova/LACompLing2018-web/proceedingsLACompLing2018](http://staff.math.su.se/rloukanova/LACompLing2018-web/proceedingsLACompLing2018)
15. Laurence Danlos, Aleksandre Maskharashvili and Sylvain Pogodalla “Interfacing Sentential and Discourse TAG-based Grammars,” *The 12th International Workshop on Tree Adjoining Grammars and Related Formalisms TAG+12, Dusseldorf, Germany*  
<https://hal.inria.fr/hal-01328697v3/document>
16. Laurence Danlos, Aleksandre Maskharashvili and Sylvain Pogodalla “Grammaires phrastiques et discursives fondées sur les TAG : une approche de D-STAG avec les ACG,” *TALN 2015 - 22e conférence sur le Traitement Automatique des Langues Naturelles, Jun 2015, Caen, France*  
<https://hal.inria.fr/hal-01145994/file/dstag-acg.pdf>
17. Laurence Danlos, Aleksandre Maskharashvili and Sylvain Pogodalla “An ACG Analysis of the G-TAG Generation Process,” *8th International Natural Language Generation Conference: INLG 2014, Philadelphia, U.S.A.*  
<http://www.aclweb.org/anthology/W14-4406>

18. Laurence Danlos, Aleksandre Maskharashvili, and Sylvain Pogodalla “An ACG View on G-TAG and Its g-Derivation,” *Logical Aspects of Computational Linguistics LACL 2014, Toulouse, France*  
<https://hal.inria.fr/hal-00999633/document>
19. Laurence Danlos, Aleksandre Maskharashvili and Sylvain Pogodalla: Génération de textes : G-TAG revisité avec les Grammaires Catégorielles Abstraites, *Actes de la 21ème conférence sur le Traitement Automatique des Langues Naturelles, TALN 2014, Marseille, France*  
<http://www.aclweb.org/anthology/F14-1015>
20. Aleksandre Maskharashvili, Sylvain Pogodalla, “Constituency and Dependency Relationship from a Tree Adjoining Grammar and Abstract Categorical Grammar Perspective.” *6th International Joint Conference on Natural Language Processing, Oct 2013, Nagoya, Japan*, pp. 1257-1263.  
<http://www.aclweb.org/anthology/I13-1179>
21. Pkhakadze K., Chichua G., Chikvinidze M., Maskharashvili A. “A Short Overview of the Aims, Methods, and Results of the Logical Grammar of the Georgian Language” *Reports of Enlarged Session of the Seminar of I. Vekua Institute of Applied Mathematics*, Volume 26, pp.58–64, 2012.
22. Pkhakadze K., Maskharashvili A., Abzianidze L., Pkhakadze N., Chiqvinidze M. “Georgian Language Ideology – Toward the Georgian Intellectual Computer System” *Historical Journal Svetitskhovely*, N2, 65–69, 2011.
23. Pkhakadze K., Abzianidze L., Maskharashvili A., Pkhakadze N., Chiqvinidze M.: “Toward the Logical Grammar of the Georgian Language and the Georgian Language Computer,” *Proceedings of the II International Conference of Arn. Chikobava Institute of Linguistics in The Georgian Language and Modern Technologies*, pp. 132-133, 2011.
24. Pkhakadze K., Maskharashvili A., Abzianidze L., Pkhakadze N., Chiqvinidze M. “The Core Part of the Georgian Language as a Mathematical Theory” *Book of Abstracts of II International Conference of Georgian International Conference of Georgian Mathematical Union*, p.66, 2011 (in Georgian).
25. K. Pkhakadze, A. Maskharashvili, L. Abzianidze “A Mathematical Analysis of Georgian Declarative Verbs” *Reports of Enlarged Session of the Seminar of I. Vekua Institute of Applied Mathematics* Volume 23, 2009.
26. K. Pkhakadze, L. Abzianidze, A. Maskharashvili “The First Version of the Intellectual Computer System in the Georgian Written Language” *Reports of Enlarged Session of the Seminar of I. Vekua Institute of Applied Mathematics* Volume 23, 2009.
27. Pkhakadze K. Chichua G. Vashalomidze A. Abzianidze L. Maskharashvili A. Chiqvinidze M. : “The Georgian Reader-Listener System with User’s Possibility to Build in an Own Synthetic Voice,” *Reports of Enlarged Session of the Seminar of I. Vekua Institute of Applied Mathematics* Volume 23, 2009.
28. K. Pkhakadze, A. Maskharashvili, L. Abzianidze, N. Bakradze, G. Chichua, L. Gurasashvili, N. Pkhakadze, N. Vakhania.: “The 2-Stage Logical Grammar of Georgian Language and The 1st Stage Voice Managed Georgian Intellectual Computer System,” *online publication of Open Institute of Georgian Language, Logic and Computation*, 2008.
29. K. Pkhakadze, A. Maskharashvili, L. Abzianidze: “Georgian Language’s Thesis,” *Seminar of I. Vekua Institute of Applied Mathematics REPORTS*, Vol. 34, 2008.
30. K. Pkhakadze, L. Abzianidze, A. Maskharashvili: “About the 1st Stage Voice Managed Georgian Intellectual Computer System,” *Seminar of I. Vekua Institute of Applied Mathematics REPORTS*, Vol. 34, 2008.
31. Pkhakadze K., Maskharashvili A., Abzianidze L., Gurasashvili L., Pkhakadze N. “Some Aspects of the Mathematical Theory of the Georgian Language and Thinking,” *VI Georgian Conference on Natural Language Processing, Arn. Chiqobava Institute of Linguistics*, Tbilisi, 2008 (in Georgian).
32. Pkhakadze K., Gabunia K., Chichua G., Maskharashvili A., Abzianidze L., Vakhania N., Pkhakadze N., Chikvinidze B., Gurasashvili L., Labadze N., Beriasvili M. “The Aims of Constructing Georgian Intellectual Computer System and Cultural Perspectives of Georgian Language,” *VI Georgian Conference on Natural Language Processing, Arn. Chiqobava Institute of Linguistics*, Tbilisi 2008 (in Georgian).
33. A. Maskharashvili, L. Abzianidze, N. Pkhakadze, N. Vakhania, N. Labadze, B. Chikvinidze “First Step Aims of the Youth Group of Georgian Language, Logic and Computer,” *III Open Seminar Week on Logic, Language and Computer*, I. Vekua Institute of Applied Mathematics, Iv. Javakhishvili Tbilisi State University, Tbilisi 2007 (in Georgian).
34. Pkhakadze K., Pkhakadze V., Abzianidze L., Labadze N., Maskharashvili A., Pkhakadze N. “Fundamental Questions of A Mathematical Theory of The Natural Logic of The Georgian Natural Language System,” *V Georgian Conference on Natural Language Processing - The Georgian Language and Computer Technologies, Arn. Chiqobava Institute of Linguistics*, Tbilisi, 2007 (in Georgian).
35. A. Maskharashvili “Double negation in the Georgian Language,” *II Open Seminar Week Presentation on Logic, Language, Computation*, I. Vekua Institute of Applied Mathematics, Ivane Javakhishvili Tbilisi State University, Tbilisi 2006 (in Georgian).