

Curriculum Vitae

- **First name, Last name:** Liviu CIORTUZ

- **Degrees:**

1996, PhD in Computer Science, University of Lille, France

Thesis: DF – a feature constraint concurrent system with application to natural language processing.

1985, Diploma in Mathematics and computer science, University of Iași, Romania

Thesis: Stochastic variables and Martingal processes.

- **Current affiliation:**

Faculty of Computer Science, University of Iași, Romania.

Since 1st October 2004: associate professor.

Between 1st October 2012 – 31 June 2013: on unpaid leave from the above named faculty.

Between 1st October 2003 – 30 September 2004: associate lecturer at the same faculty.

- **Previous/other positions:**

Associate Researcher INRIA Bretagne/Atlantique, Data Knowledge Management department, Genscale team, Rennes, France. September 2012 – September 2013.

Contributing to the Région Bretagne SAD-MIRAGE and French ANR-12-BS02-0008 Colib' read projects: designing and implementing a system for the identification of genomic variations in NGS (Next Generation Sequencing) data using de Bruijn Graphs, without reference genome.

Associate Researcher Computational Biology Lab, Computer Science Department of the University of Wales, Aberystwyth, UK. November 2002 – September 2003.

Contributing to the BBSRC project "Bio-Logical": An intelligent database for functional genomics.

Associate Researcher Computer Science Department of the University of York, UK. January 2001 – September 2002.

Working on the EPSRC ROPA project "Machine Learning for Natural Language Processing in a Computational Logic framework": Inductive Logic Programming for automate learning of typed-unification grammars.

Researcher, and then senior researcher

June 1997 – January 2001.

Language Technology Lab of DFKI GmbH, The German Research Institute for Artificial Intelligence, Saarbrücken, Germany.

Working on the VERBMOBIL project: Designing and implementing an abstract machine-based compilation of feature structure unification and a compiler for head-corner parsing with large-scale constraint-based (HPSG-like) grammars.

Assistant, and then lecturer Computer Science Faculty, University of Iași, Romania. October 1990 – June 1997.

Given courses and seminars: see below.

Part-time PhD student at University of Lille, France. November 1994 – December 1996.

Research assistant The Institute for Theoretical Informatics, Romanian Academy, branch of Iași, Romania. October 1987 – September 1990.

Working on a machine translation prototype system for English to Romanian.

Programmer at the “Mechanica” Factory, Bacău, Romania. October 1985 – September 1987.

• **Fields of current interest:**

Machine learning and applications
Bioinformatics

• **Fields of past interest:**

Natural language processing
Parsing with large-scale unification-based grammars
Compilation techniques, in particular abstract machines
Logic and constraint programming
Machine translation

• **Research projects:**

- “*SAD-MIRAGE*” funded by Région Bretagne, and “*Colib’read*”, funded by the Agence Nationale de la Recherche (ANR) France. INRIA – Rennes, September 2012 – September 2013.
- “*ALEAR*”: *Artificial Language Evolution on Autonomous Robots*, (EU FP7), at the Faculty of Informatics, “Al. I. Cuza” University of Iași, Romania. February 2008 – January 2011.
- “*ALEAR 37EU*”: *Artificial Language Evolution on Autonomous Robots*, funded by the Romanian Ministry for Education and Research, at the Faculty of Informatics, “Al. I. Cuza” University of Iași, Romania. May 2008 – November 2010.
- “*ForMol*”: *Computational formalisms inspired from molecular biology*, (PN II), at the Faculty of Informatics, “Al. I. Cuza” University of Iași, Romania. February 2006 – November 2007.
- “*Bio-Logical*”: *An intelligent database for functional genomics*, (BBSRC), at the Computational Biology Lab, Computer Science Department of the University of Wales, Aberystwyth, UK. November 2002 – September 2003.
- “*ROPA*”: *Machine learning for natural language processing in a computational logic framework*: *Inductive logic programming for automate learning of typed-unification grammars*, (EPSRC), at the Computer Science Department of the University of York, UK. January 2001 – September 2002.
- “*VERBMOBIL*”, at the Language Technology Lab of DFKI GmbH, The German Research Institute for Artificial Intelligence, Saarbrücken, Germany. May 1997 – January 2001.

- **Given courses and seminars:**

- *Machine Learning*: BSc level (1990–1994, 2003–2008, 2014–today), and MSc level (2009–2012, 2014–2015), PhD level (2008)
- *Special Chapters of Machine Learning*: MSc level (2015–today)
- *Special Chapters of Artificial Intelligence*: MSc level (2018–today), at the Faculty of Mathematics of „A.I.Cuza“ University of Iași, Romania
- *Bioinformatics*: BSs level (2007–2012)
- *Applications of Machine Learning into Bioinformatics*: MSc level (2005–2009)
- *Statistical Natural Language Processing*: MSc level (2003–2006), PhD level (2006, 2008)
- *Artificial Intelligence*: BSc level (2003–2004)
- *Machine Translation* (compact course): MSc level (October 2002)
- *Concurrent Constraint Programming*: diploma level (1996–1997)
- *Mathematical Logic and Logic Programming*: diploma level (1991–1993)
- *Natural Language Processing* (seminaries): diploma level (1990–1994)
- *Database Systems* (seminaries): diploma level (1990–1992)
- *Object-oriented Software Engineering*: diploma level (1992–1994)

- **Programming languages mastered:**

C/C++; some experience in Prolog, Matlab, Perl, SQL.

- **Implemented systems:**

- intl* – a system for the identification of inversion breakpoints in NGS (Next Generation Sequencing) data using de Bruijn Graphs (C++)
- LIGHT – a compiler for head-driven parsing with unification grammars (C), particularly for LinGO, the wide-coverage grammar for English elaborated at CSLI, University of Stanford
- ilp*LIGHT – a machine learning system for typed-unification grammars (C) adapting Inductive Logic Programming to feature-constraint logic
- DF – a feature constraint concurrent language (Oz), in F-logic
- CHALLENGER – a prototype MT system from English into Romanian (C/Oz)
- HPSG RoCK – a parser for a HPSG subset of Romanian (Oz).
- LOGOS – an object-oriented framework to implement logic languages (C++), in particular Proplog, Datalog and Prolog

- **Co-designed systems::**

- (not named)* – a system for malware detection, based on perceptrons, used by the BitDefender antivirus engine to reduce as much as possible the number of false alarms; co-designers and implementors: Dragoș Gavriliuț, Mihai Cimpoeșu, Dan Anton
- FCG light – an implementation of the core of the FCG formalism co-designer and implementor: Vlad Saveluc
- (not named)* – a system for parsing and production of the Romanian accusative clitics, using Fluid Construction Grammars; co-designer and implementor: Vlad Saveluc
- AdMiRAIl – a system for the identification of microRNAs using Random Forests; main designer and (sole) implementor: Lucian Ioniță

- yasMiR – an SVM-based system for the identification of microRNAs; implementors: Daniel Pasaila (main author), Andrei Sucilă, Irina Mohorianu, and Ștefan Panțiru
- McGnuGO – a program for playing GO, using the Monte Carlo machine learning method; main author and (single) implementor: Florin Chelaru

- **Visiting research stages:**

“SONY” Computer Science Laboratory, France. (Invited by Prof. Luc Steels.) 4–9 February 2011.

Biozentrum, University of Basel, Switzerland. (Invited by Dr. Mihaela Zavolan.) 1–18 August 2007.

Laboratoire d’Informatique Fondamentale (LIFL), Université des Sciences et Technologies de Lille (USTL), Lille, France. (Invited by Dr. Grégory Kucherov.) 1 June – 31 July 2007.

Computer Science Department of the National University of Singapore. (Invited by Prof. Lim Soon Wong and Dr. Martti Tammi.) 4–18 September 2006.

Laboratoire d’Informatique Fondamentale (LIFL), Université des Sciences et Technologies de Lille (USTL), Lille, France. (Invited by Dr. Hélène Touzet.) 1 June – 31 July 2006.

Computer Science Faculty of the University of Iași, Romania. (Invited by Assoc. Prof. Dan Cristea.) October 2002.

University of Stanford, CSLI – Center for the Study of Language and Information. (Invited by Prof. Ivan Sag and Dr. Dan Flickinger.) 9–15 March 1999.

Computational Linguistics Lab at the German Research Center for Artificial Intelligence (DFKI), Saarbrücken, Germany. (Invited by Prof. Hans Uszkoreit.) September – October 1996.

Programming Systems Lab at the German Research Center for Artificial Intelligence (DFKI), Saarbrücken, Germany. (Invited by Prof. Gert Smolka.) March – April 1996.

Laboratoire d’Informatique Fondamentale (LIFL), Université des Sciences et Technologies de Lille (USTL), Lille, France. (Invited by Prof. Jean-Paul Delahaye.) November 1994 – April 1995; October 1995 – February 1996; September 1996 – December 1996.

- **Scholarships:**

1994–1996, a (co-supervised) PhD scholarship offered by the French Ministry of Foreign Affairs.

- **Given talks:**

A retrospective view on the bioinformatics course taught at the Faculty of Computer Science of the “Al.I.Cuza” University of Iași, Romania between 2005-2012, 24 November 2017, Faculty of Biology and Geology, University “Babeș-Blyai”, Cluj-Napoca, Romania, at the “Perspectives of the Bioinformatics in Romania” Workshop.

Identifying inversion breakpoints in NGS genomic data, without reference genome: the intl-BP prototype, 20 June 2014, Romanian Academy (the branch of Iași). The anniversary symposium IIT-30.

En mai, assemble ce qu'il te plaît, avec Pierre Peterlongo, Raluca Uricaru and Guillaume Rizk and Claire Lemaître. Journées “Algorithmique de l’assemblage”, 15 Mai 2013, Université de Bordeaux, France.

Intl — An algorithm for identification of inversions in NGS data, without reference genome, using De Bruijn graphs, 26 April 2013. SYMBIOSE seminar, INRIA Rennes-Atlantique, France.

Towards the identification of structural variations in NGS data using de Bruijn graphs: The case of inversions, kick-off meeting of the Colib’read ANR project, Université de Lyon 1, France, 13 March, 2013.

A pattern characterizing genomic inversions in de Bruijn graphs for NGS data, workshop in the framework of the ALCOVNA project, Paris, France, 29-31 October, 2012.

Fluid Construction Grammar: Two case studies for Romanian, “SONY” Computer Science Laboratory, Paris, 8 February 2011.

Inductive grammar learning in the LIGHT system, Workshop in the framework of the “ALEAR” Project (FP7), Universität “Humboldt” Berlin, Germany, 3–5 November 2008.

Efficient parsing with a large-scale unification-based grammar: Lessons from a multi-year, multi-team endeavour, Workshop in the framework of the “ALEAR” Project (FP7), Bran, Romania, September 2008.

Support vector machines for microRNAs classification, Departament of Mathematics, “Lucian Blaga” University, Sibiu, România, 7 November 2007.

GR — An efficient algorithm for feature selection in large scale typed unification grammars, Department of Computer Science, National University of Singapore, 14 September 2006.

Towards integrated — shallow and deep — parsing for mining bio-medical texts, University of Wales, Aberystwyth, UK, 22 July 2003.

Interesting classes of feature paths in large-scale unification grammars, ITC-IRST, Trento, Italy, 13 September 2002.

Interesting classes of feature paths in large-scale unification grammars, School of Computer Applications, Dublin City University, Ireland, 22 July 2002.

From F-logic to OSF-logic: constructive critiques, STARLab, Vrije Universiteit Brussel, Belgium, 6 February 2002.

Towards ILP-based learning of typed-unification grammars, CNTS, University of Antwerpen, Belgium, 12 November 2001.

LIGHT — a constraint programming language and its compilation. Application to the deep analysis of natural language, ABB Corporate Research Center, Zurich, Switzerland, 11 July, 2001.

Compiling large-scale feature-constraint grammars, Department of Computer Science, University of York, UK, 22 June, 2001.

On compilation of large typed unification grammars, Laboratoire d’Informatique Théorique, Ecole Polytechnique Fédérale de Lausanne, Switzerland, 24 November 2000.

New LIGHT on LinGO, Laboratory of Language Technology, DFKI – Saarbrücken, Germany, 12 August 2000.

Scaling up the Abstract Machine for Order-Sorted Feature Structures, at *Efficient Language Processing with High-level Grammar Formalisms*, Dagstuhl Seminar 99421, Germany, 17–22 October 1999.

Specialized Compilation of HPSG Rules, Laboratory of Language Technology, DFKI – Saarbrücken, Germany, 12 August 1999.

Compiling HPSG into C, University of Stanford, CSLI – Center for the Study of Language and Information, 11 April 1999.

Designing a Compiler for HPSG Into C, at *The 1st working meeting on efficient parsing with wide-coverage HPSG grammars*, Berlin, 23–25 March 1999.

Mastering clitics' disorder, EUROLAN'97, The European Summer School on Corpus Linguistics, Tuşnad, Romania, July 1997.

Concurrent Constraint Programming — the Oz Programming Model, LIFL, University of Lille, March 1996.

Feature Constraint Systems, LIFL, University of Lille, April 1995.

- **International courses attended:**

“Journées assemblage”, Institut Pasteur, Paris, France, 2012.

“Embodied Language Games and Construction Grammar”, Cortona, Italy, 2009.

“School of Pattern Analysis”, Erice, Italy, 2005.

“Natural Language and Logic Interfaces”, Beliş-Fîntînele, Romania, 1996.

“Ecole doctorale sur la programmation”, Nancy, France, 1995.

“Natural Language Processing and Logic Programming”, Iaşi, Romania, 1993.

“Contemporary Topics in Computational Linguistics”, Tzigow-Chark, Bulgaria, 1992.

- **Spoken languages:**

English (good), French (fluent), German (basic knowledge), Romanian (native).

- **Member of** the program committee of the Computational Modelling and Bioinformatics in Epigenetics (CMBE2014), held in conjunction with IEEE International Conference on Bioinformatics and Biomedicine (BIBM 2014), Belfast, UK, 2-5 November 2014.

Member of the program committee of IARIA ComputationWorld (COGNITIVE) Conference, Lisbon, Portugal, 2010.

Co-organiser (together with Alexandru Floareş) of the special session Biological Applications and Soft Computing at the 4th International Workshop on Soft Computing Applications (SOFA), Arad 2010.

Member of the organising committee of ARA-30, the 30th International Congress of American-Romanian Academy, Chishinew, Moldova, 2005.

Member of the Reviewing Committee of the special issue of the Natural Language Engineering Journal on Robust Methods in Analysis of Natural Language Data, March 2002.

- **Member of** the reviewing committee of the Scientific Annals of the “Al.I. Cuza” University of Iaşi, Romania, Computer Science Series, 2003–2008.
- Co-organizer — and **co-editor** of the *Informal Proceedings* — of the Workshop on Grammar Learning and Grammar Engineering, Tuşnad, Romania, 17 July 1997.

- **Civil status:** married, have 1 child.

- **Referees:**

Prof. Dr. Jean-Paul Delahaye
L.I.F.L., Université de Lille 1,
Cité Scientifique, Bât. M3-ext, bureau 216



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• **Permanent (professional) address:**

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21st of November, 2022

Liviu CIORTUZ — Publications

Books:

1. L. Ciortuz. *Fundamente matematice ale învățării automate: Exerciții*. Published online, 2020, 208 pages, <https://profs.info.uaic.ro/~ciortuz/ML.ex-book/Math4ML/>. ISBN: 978-973-0-33166-0.
2. L. Ciortuz, A. Munteanu, E. Bădărău. *Exerciții de învățare automată*. Ediția a III-a, revizuită. Published online, 2020, 740 pages, <https://profs.info.uaic.ro/~ciortuz/ML.ex-book/>. ISBN: 978-973-0-33148-6.
3. L. Ciortuz, A. Munteanu, E. Bădărău. *Exerciții de învățare automată*. Ediția a II-a, revizuită și adăugită. Published online, 2019, 806 pages, <https://profs.info.uaic.ro/~ciortuz/ML.ex-book/editia-2019/>. ISBN: 978-973-0-30467-1.
4. L. Ciortuz, A. Munteanu, E. Bădărău. *Exerciții de învățare automată*. Editura Universității „Al. Ioan Cuza” Iași, 2016, 362 pages. ISBN: 978-606-714-197-9.
5. L. Ciortuz, *Parsing with unification-based grammars. The LIGHT compiler*. Edit-Dan Publishing House, Iași, Romania, 2004, x+108 pages. ISBN: 973-8365-22-8.

Chapters in books:

6. L. Ciortuz, V. Saveluc. *Fluid Construction Grammar and feature constraint logics*. In “Computational Issues in Fluid Construction Grammars”, L. Steels (ed.), Springer Verlag, 2012, pp. 289–311. (Indexed by: SpringerLink)
7. L. Ciortuz, V. Saveluc. *FCGlight: Bridging Fluid Construction Grammars and mainstream unification grammars using feature constraint logics*. In “ALEAR Final Report III, Fluid Construction Grammars, WP6 — Language”, L. Steels (ed.), ALEAR Review, Berlin, April 2011, pp. 336–361.
8. D. Pasailă, I. Mohorianu, A. Sucilă, Șt. Panțiru, L. Ciortuz, *MicroRNA recognition with the yasMiR system: The quest for further improvements*. In “Software Tools and Algorithms for Biological Systems”, volume in the “Advances in Experimental Medicine and Biology” series, Springer Verlag, New York, USA, 2011, ISSN: 0065-2598, ISBN: 978-1-4419-7045-9, pp. 17–25. (ISI; Indexed by: Medline, PubMed, BioBank, SpringerLink)
9. L. Ciortuz, *On two classes of feature paths in large-scale unification grammars*. In “New Developments in Parsing Technologies”, Harry Bunt, Giorgio Satta, John Carroll (eds.), Kluwer Academic Publishers, 2005, pp. 203–227. ISBN: 1-4020-2293-X. (ISI; Indexed by: SpringerLink)
10. L. Ciortuz, *LIGHT AM — Another Abstract Machine for Feature Structure Unification*, in “Efficiency in Unification-based Processing”, D. Flickinger, S. Oepen, J. Tsujii and H. Uszkoreit (eds.), CSLI Publications, The Center for the Study of Language and Information, Stanford University, 2002, pages 167–194. ISBN: 1575862905.

Articles in journals:

11. *A Factor Analysis Perspective on Linear Regression in the ‘More Predictors Than Samples Case*. Sebastian Ciobanu, Liviu Ciortuz. In *Journal of Entropy*, vol. 23, nr. 8: 1012 (Special Issue Information Theory in Machine Learning and Data Science II), 2021. <https://doi.org/10.3390/e23081012>
12. *Differentiation between peanut allergic, peanut-sensitized and non-allergic childrens gene expression NanoString profiles using a random forest machine learning algorithm*. Victor Țurcanu, Alina Munteanu, Aurelian Țuțuianu, Asha Sudra, Alick Stephens, Helen Brough, Gideon Lack, Liviu Ciortuz. *Journal of Clinical and Experimental Allergy*, vol. 47, no. 12, p. 1713, 2017, John Wiley and Sons.
13. *IL-9 is a key component of memory T-H cells peanut-specific responses from peanut allergic children*. Helen A. Brough, David J. Cousins, Alina Munteanu, Yuen Fei Wong, Asha Sudra, Kerry Makinson, Alick C. Stephens, Matthew Arno, Liviu Ciortuz, Gideon Lack, Victor Țurcanu. In *Journal of Allergy and Clinical Immunology*, vol. 134, issue 6, December 2014, ISSN: 0091-6749, pag. 1329-1338.e10. (Indexed by: ISI, PubMed, ScienceDirect, DBLP) <https://doi.org/10.1016/j.jaci.2014.06.032>
14. L. Ciortuz, V. Saveluc, *Implementing the Romanian accusative clitic pronouns in Fluid Construction Grammars*. *Buletinul Institutului Politehnic din Iași, Tomul I, Fasc. 1*, 2014, pag. 105-116. (Indexed by: Zentralblatt Index)
15. D. Gavriluț, M. Cimpoșu, D. Anton, L. Ciortuz, *Malware detection using machine learning*. In *Mathematica Balkanica*, (a journal of the Bulgarian Academy of Science), vol. 23 (2009), fasc. 3-4, pag. 209-229. (Indexed by: Zentralblatt Index)
16. R. Uricaru, L. Ciortuz, *Genic interaction extraction from MEDLINE abstracts — A case study*. In *Scientific Annals of the “Al.I. Cuza” University of Iași, Romania, Computer Science Series*, 2005, pages 137–152. (Indexed by: MicrosoftAcademic, DBLP)
17. L. Ciortuz, *The quick check pre-unification filter for typed grammars: Further advances*. In *Scientific Annals of the “Al.I. Cuza” University of Iași, Romania, Computer Science Series*, 2004, pages 36–50. (Indexed by: DBLP)
18. L. Ciortuz, *Inductive learning of attribute path values in typed-unification grammars*. In *Scientific Annals of the “Al.I. Cuza” University of Iași, Romania, Computer Science Series*, 2003, pages 105–125. (Indexed by: DBLP, Zentralblatt Index)
19. L. Ciortuz, *Logic programming with built-in object-orientation*. In *Scientific Annals of the “Al.I. Cuza” University of Iași, Romania, Computer Science Series*, 1993, pages 73–92. (Indexed by: DBLP)

Conference refereed papers:

20. S. Ciobanu, L. Ciortuz, *Semantic image inpainting via maximum likelihood*. In *Proceeding of The 22th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC)*, Timișoara, Romania, 2020. pages: 153–160. (Indexed by: SpringerLink, DBLP)
21. C. Lemaître, L. Ciortuz, P. Peterlongo, *Mapping-free and assembly-free discovery of inversion breakpoints from raw NGS data*. In *Algorithms for Computational Biology*, Springer Verlag, LNCS vol. 8542. 2014. pages: 119-130. (Indexed by: SpringerLink, DBLP)

22. L. Ciortuz, V. Saveluc, *Learning to unlearn in lattices of concepts: A case study in Fluid Construction Grammars*. In Proceedings of The 13th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC), Timișoara, Romania, 2011. IEEE Computer Society CPS, ISBN: 978-0-7695-4630-8, pages: 160–167. (Indexed by: SpringerLink, DBLP)
23. D. Gavriluț, L. Ciortuz, *Dealing with class noise in large training datasets for malware detection*. In Proceedings of The 13th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC), Timișoara, Romania, 2011. IEEE Computer Society CPS, ISBN: 978-0-7695-4630-8, pages: 401–407. (Indexed by: DBLP)
24. V. Saveluc, L. Ciortuz, *FCGlight: A System for Studying the Evolution of Natural Language*. In Proceedings of The 12th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC), Timișoara, Romania, 2010. IEEE Computer Society CPS. ISBN: 987-0-7695-4324-6, pages: 188–193. (Indexed by: MicrosoftAcademic, DBLP)
25. A.-L. Ioniță, L. Ciortuz, *Pre-miRNA features for automated classification*. In Proceedings of The 4th International Workshop on Soft Computing Applications (SOFA), Arad, Romania, 2010. ISBN: 978-1-4244-7985-6, IEEE Catalog Number: CFP1028D-CDR, pages 125–130. (Indexed by: MicrosoftAcademic)
26. D. Gavriluț, M. Cimpoesu, D. Anton, L. Ciortuz, *Malware detection using machine learning*. In Proceedings of IMCSIT Conference, 2009 (WCO – Workshop on Computational Optimization). IEEE Computer Society CPS, ISSN 1896-7094, ISBN 978-83-60810-22-4, pages 735–741. (Indexed by: MicrosoftAcademic, DBLP, ZentralBlatt Index)
27. L. Ciortuz, Șt. Panțiru, *Towards a LIGHT implementation of Fluid Construction Grammars*. In Proceedings of IARIA ComputationWorld (COGNITIVE) Conference 2009, IEEE Computer Society CPS, pages 283–286. (ISI; Indexed by: MicrosoftAcademic)
28. D. Gavriluț, M. Cimpoesu, D. Anton, L. Ciortuz, *Malware detection using Support Vector Machines and perceptrons*. In Proceedings of IARIA ComputationWorld (PATTERNS) Conference 2009, IEEE Computer Society CPS, pages 511–516. (ISI)
29. L. Ciortuz, D. Pasailă, I. Mohorianu, *Using base pairing probabilities for MiRNA recognition*. In Proceedings of SYNASC 2008, The 9th international symposium on Symbolic and Numeric Algorithms for Scientific Computing, Timișoara, Romania, IEEE Computer Society CPS, 2008, pages 519–525. (ISI; Indexed by: MicrosoftAcademic, DBLP)
30. F. Chelaru, L. Ciortuz, *Combining old-fashioned computer Go with Monte Carlo Go*. In Proceedings of SYNASC 2008, The 9th international symposium on Symbolic and Numeric Algorithms for Scientific Computing, Timișoara, Romania, IEEE Computer Society CPS, 2008, pages 216–222. (ISI; Indexed by: MicrosoftAcademic, DBLP)
31. M. Gîrdea, L. Ciortuz, *A hybrid genetic programming and boosting technique for learning kernel functions from training data*. In Proceedings of SYNASC 2007, The 9th international symposium on Symbolic and Numeric Algorithms for Scientific Computing, Timișoara, Romania, IEEE Computer Society CPS, 2007, pages 395–402. (ISI; Indexed by: MicrosoftAcademic, DBLP)
32. L. Ciortuz, *Support vector machines for microRNAs classification*. In Proceedings of EHB'07, The Workshop on E-Health and Bio-Engineering, University of Medicine and Pharmacy “Gr. T. Popa”, Iași, Romania, 2007, pages 60–63.

33. L. Ciortuz, *The quick check pre-unification filter for typed grammars: Extensions*. In Proceedings of the 9th International Workshop on Parsing Technologies (IWPT'05), Vancouver, Canada, 2005, pages 188–189.
34. L. Ciortuz, *Exploring possible extensions to the quick check pre-unification filter*. In Proceedings of ARA-30, the 30th International Congress of American-Romanian Academy, Chishinew, Moldova, 2005.
35. L. Ciortuz, *Compilation of quasi-destructive unification of type feature structure*. (Extended abstract.) In Proceedings of the 11th Automate Reasoning Workshop (ARW 2004), University of Leeds, UK, 2004, 2 pages.
36. L. Ciortuz, *Generalizing large-scale unification grammars leads to improving the design of an abstract machine*. (Extended abstract.) In Proceedings of the 10th Automate Reasoning Workshop (ARW 2003), Liverpool University, UK, 2003, 2 pages.
37. L. Ciortuz, *On learning typed-unification grammars*. (Extended abstract.) In Proceedings of the 9th Automate Reasoning Workshop (ARW 2002), Imperial College, London, 2002, 2 pages.
38. L. Ciortuz, *LIGHT — a constraint language and compiler system for typed-unification grammars*. In “KI 2002: Advances in Artificial Intelligence”, Proceedings of the 25th Annual German Conference on Artificial Intelligence, Aachen, Germany, 2002. M. Jarke, J. Köhler, G. Lakemeyer (eds.). Lecture Notes in Artificial Intelligence (LNAI) vol. 2479, Springer-Verlag, 2002, pages 3–17. (ISI; Indexed by: SpringerLink, DBLP)
39. L. Ciortuz, *A framework for inductive learning of typed-unification grammars*. In “Grammatical Inference: Algorithms and Applications”, Proceedings of the International Conference on Grammar Inferences, (ICGI), Amsterdam, 2002. P. Adriaans, H. Fernau M. van Zaanen (eds.). Lecture Notes in Artificial Intelligence (LNAI) vol. 2484, Springer-Verlag, 2002, pages 299–301. (ISI; Indexed by: SpringerLink, DBLP, Zentralblatt Index)
40. L. Ciortuz, *Learning attribute values in typed-unification grammars: On generalised rule reduction*. In Proceedings of the Conference for Learning Natural Language (CoNLL), held in conjunction with COLING. Taipei, Taiwan, 2002. Dan Roth and Antal van den Bosch (eds.). Morgan Kaufmann Publishers, 2002, pages 70–76.
41. L. Ciortuz. *On compilation of the Quick-Check filter for feature structure unification*. In Proceedings of the 7th International Workshop on Parsing Technologies (IWPT'01), Beijing, China, 2001, pages 90–100. (Indexed by: DBLP)
42. L. Ciortuz, *On specialised compilation of rules in unification grammars*. In Proceedings of the 7th International Workshop on Parsing Technologies (IWPT'01), Beijing, China, 2001, pages 209–212. (Indexed by: DBLP)
43. L. Ciortuz, *Expanding feature-based constraint grammars: Experience on a large-scale HPSG grammar for English*. In Proceedings of the IJCAI 2001 Workshop on Modelling and Solving Problems with Constraints, Seattle, USA, 2001, 10 pages.
44. L. Ciortuz. *Compiling OSF-theory unification: scaling up the AM for unification of OSF-terms*. In Proceedings of the ECAI 2000 co-located Workshop on Logic Programming and Constraint Systems, Berlin, Germany, 2000, GMD-FIRST Research Report, pages 85–98. (Indexed by: DBLP)

45. L. Ciortuz, *Scaling up the abstract machine for unification of OSF-terms to do head-corner parsing with large-scale typed unification grammars*. In Proceedings of the Workshop on Linguistic Theory and Grammar Implementation, part of the Twelfth European Summer School in Logic, Language and Information (ESSLI), 2000, Birmingham, Great Britain, pages 57–80.
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