PARISA ALVANDI

PERSONAL INFORMATION

email p.alvandi@yahoo.com
palvandi@uwo.ca

website http://publish.uwo.ca/~palvandi/

LinkedIn https://ca.linkedin.com/pub/parisa-alvandi/b6/259/4b7

phone (W) +1 (519) 661 2111 (ext. 86891)

EDUCATION

PhD The University of Western Ontario

2012-2017

School: Computer Science
Tittle of thesis: *Computing Limit Points of Quasi-components of Regular Chains and its Applications*
Advisor: Prof. Marc Moreno Maza

MSc Isfahan University of Technology

2009-2011

School: Mathematical Sciences
Tittle of thesis: *Computing Gröbner Basis over Rings and Its Applications*
Advisor: Prof. Amir Hashemi

BSc K. N. Toosi University of Technology

2005-2009

School: Mathematical Sciences
Advisor: Prof. Fereshte Malek

PUBLICATIONS

Parisa Alvandi, Masoud Ataei, Mahsa Kazemi, Marc Moreno Maza. *Computing limits of a real multivariate rational function at isolated zeros of its denominator*, J. Symbolic Comput, 2017.

Parisa Alvandi, Masoud Ataei, Marc Moreno Maza. *On the extended Hensel construction and its application to the computation of limit points*, ISSAC 2017.

Parisa Alvandi, Mahsa Kazemi, Marc Moreno Maza. *Computing Limits of Real Multivariate Rational Functions*, ISSAC 2016.

Parisa Alvandi, Mahsa Kazemi, Marc Moreno Maza. *Computing Limits with the RegularChains and PowerSeries libraries: From Rational Functions to Zariski Closure*, ISSAC 2016.

Parisa Alvandi, Marc Moreno Maza. *Real limit points of quasi-componenets of regular chains*, ISSAC 2016.

Parisa Alvandi, Changbo Chen, Amir Hashemi, Marc Moreno Maza. *Regular Chains under Linear Changes of Coordinates and Applications* , CASC 2015.

Parisa Alvandi, Marc Moreno Maza, Éric Schost, Paul Vrbik. *A Standard Basis Free Algorithm for Computing the Tangent Cones of a Space Curve*, CASC 2015.

Parisa Alvandi, Changbo Chen, Steffen Marcus, Marc Moreno Maza, Éric Schost, Paul Vrbik. *Doing Algebraic Geometry with the RegularChains Library*, ICMS 2014.

Parisa Alvandi, Changbo Chen, Marc Moreno Maza. *Computing the Limit Points of the Quasi-component of a Regular Chain in Dimension One* , CASC 2013.

Parisa Alvandi, Amir Hashemi. *Applyling Buchberger's Criteria for Computing Gröbner Bases over Finite Chain Rings*, Journal of Algebra and its Applications 2013.

Parisa Alvandi, Amir Hashemi, *Detecting Unnecessary Reductions in Gröbner Bases over Galois Rings* , Proc. of the 42nd Annual Iranian Mathematics Conference, 2011.

POSTERS AND PRESENTATIONS

May, 2017 — Oral Presentation at the University of Western Ontario (PhD thesis).

April, 2017 — Poster Presentation, On the Extended Hensel Construction, ECCAD Conference.

April, 2017 — Oral Presentation, Computing limits of real multivariate rational functions, UWORCS Conference, University of Western Ontario (winner).

July, 2016 — Oral Presentation, Computing Limits with the RegularChains and PowerSeries libraries: From Rational Functions to Zariski Closure, Software presentation, ISSAC Conference.

October, 2015 — Poster Presentation, A Standard Basis Free Algorithm for Computing the Tangent Cones of a Space Curve, ECCAD Conference.

September, 2015 — Oral Presentation, Regular Chains under Linear Changes of Coordinates and Applications, CASC Conference.

April, 2015 — Oral Presentation, Doing Algebraic Geometry with the RegularChains Library, UWORCS Conference, University of Western Ontario.

Dec, 2014 — Poster Presentation, Applying Regular Chains theory to the study of Dynamical Systems, Interdisciplinary Science Showcase.

April, 2014 — Oral Presentation, A Data-Structure for Optimizing Polynomial System Solvers, UWORCS Conference, University of Western Ontario.

April, 2013 — Oral Presentation, An Algorithm for Computing the Limit Points of the Quasi-component of a Regular Chain, UWORCS Conference, University of Western Ontario.

August, 2011 — Oral Presentation at the Isfahan University of Technology (Master Thesis).

September, 2011 — Poster Presentation, DETECTING UNNECESSARY REDUCTIONS IN COMPUTING GROBNER BASES OVER GALOIS RINGS ", 42nd Annual Iranian Mathematics Conference Vali-e-Asr University, Iran.

PROJECTS

`RegularChains` Library implemented in Maple
http://www.regularchains.org/

`PowerSeries` Library implemented in Maple
http://www.regularchains.org/

`BPAS` Library implemented in C++ and CilkPlus
http://www.bpaslib.org/

WORK EXPERIENCE

Research Assistant

2012–Present — The University of Western Ontario
Supervisor: Marc Moreno Maza moreno@csd.uwo.ca

2009–2011 Isfahan University of Technology
Supervisor: Amir Hashemi amir.hashemi@iut.ac.ir

Internship

2013–2013 Internship, Maplesoft, Waterloo, Jul 2013 – Oct 2013.
http://www.maplesoft.com/solutions/education/

Teaching Assistant

2012–2017

- Logic in Computer Science, Jan 2017 – Apr 2017.
- Multimedia and Communications, Sep 2015 – Dec 2015.
- Introduction to Software Engineering, Jan 2015 – Apr 2015.
- Multimedia and Communications, Sep 2013 – Dec 2014.
- CALCULUS, University of Western Ontario, Sep 2014 – Dec 2012.

COMPUTER SKILLS

Basic C, C++, CilkPlus.

Intermediate LaTeX, OpenOffice, Linux, Microsoft Windows, Maple, Matlab, subversion, html, CSS, Bash.

AWARDS

2012 University of Western Ontario Scholarship (WGRS Scholarship).

2010 Isfahan University of Technology Scholarship (Top Student Post graduate Scholarship).

2008 Top acheiver Award in BSc degree

June 15, 2017