

Anya Tafliovich – Curriculum Vitae

Personal Data

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Current Research Interests

Formal Methods of Software Design, Quantum Computing, Automated Verification,
Automated Reasoning

Education

09/2004 – present Doctor of Philosophy
Department of Computer Science, University of Toronto, Canada
Supervisor: Dr. Eric C. R. Hehner (<http://www.cs.toronto.edu/~hehner>)
Expected graduation: Fall 2009

09/2002–08/2004 Master of Science
Department of Computer Science, University of Toronto, Canada

09/1998–06/2002 Honours Bachelor of Science With High Distinction
Department of Computer Science, University of Toronto, Canada
Programs completed: Specialist in Computer Science, Major in Mathematics

Major Awards

09/2005–08/2007 Natural Sciences and Engineering Research Council of Canada (NSERC)
Postgraduate Scholarship, PhD level

09/2005–08/2006 Ontario Graduate Scholarship (OGS) – declined

09/2004–08/2005 Natural Sciences and Engineering Research Council of Canada (NSERC)
Postgraduate Scholarship, PhD level

09/2003–08/2004 Natural Sciences and Engineering Research Council of Canada (NSERC)
Postgraduate Scholarship, Master's level

09/2003–08/2004 Ontario Graduate Scholarship (OGS) – declined

09/2002–08/2003 Ontario Graduate Scholarship (OGS)

Research Work

Papers

Anya Tafliovich and Eric C.R. Hehner. Programming with quantum communication. In *Proceedings of the 7th ETAPS Workshop on Quantitative Aspects of Programming Languages (QAPL)*, Electronic Notes in Theoretical Computer Science (ENTCS), York, UK, 2009.

Anya Tafliovich and Kevin Ku. AI planning by multi-valued model-checking. Submitted for publication, 2009.

Anya Tafliovich. It's not magic: I can prove it. In *Proceedings of the GHC New Investigators*, Orlando, USA, 2007.

Anya Tafliovich and Eric C.R. Hehner. Programming telepathy: Implementing quantum non-locality games. In *Proceedings of the 10th Brazilian Symposium on Formal Methods*, Ouro Preto, Brazil, 2007. Invited for a special issue of Elsevier's Electronic Notes in Theoretical Computer Science (ENTCS) 2009.

Anya Tafliovich and Eric C.R. Hehner. Quantum predicative programming. In *Proceedings of the 8th International Conference on Mathematics of Program Construction (MPC)*, volume 4014 of *Lecture Notes in Computer Science (LNCS)*, Kuressaare, Estonia, 2006.

Anya Tafliovich. Quantum programming. Master's thesis, University of Toronto, 2004.

M. Chechik, B. Devereux, S. M. Easterbrook, A. Gurfinkel, A. Lai, V. Petrovykh, A. Tafliovich, and C. Thompson-Walsh. χ chek: A model checker for multi-valued reasoning. In *Proceedings of the 25th International Conference on Software Engineering (ICSE)*, Portland, USA, 2003.

Anya Tafliovich and Alex Kress. Using grid solution methods for a POMDP formulation of Preference Elicitation problem. Technical report, University of Toronto, 2002.

Anya Tafliovich and Andriy Misyura. Algorithms for solving matching problems involving floating point arithmetic. Technical report, University of Toronto, 2001.

Posters (refereed)

Anya Tafliovich. On quantum non-locality. Grace Hopper Celebration of Women in Computing, Orlando, USA, 2007.

Anya Tafliovich. Quantum predicative programming. 14th International Symposium on Formal Methods (FM), Hamilton, Canada, 2006.

Anya Tafliovich. Formalizing quantum pseudo-telepathy games. 4th International Workshop on Quantum Programming Languages (QPL), Oxford, United Kingdom, 2006.

Anya Tafliovich. Quantum programming. Quantum Information, Computation and Logic: Exploring New Connections, Perimeter Institute, Waterloo, Canada, 2004.

Invited Talks

Anya Tafliovich. On writing correct quantum programs. Institute for Quantum Computing, Waterloo, Canada, 2009.

Anya Tafliovich. Predicative quantum programming. Canadian Quantum Information Student Conference, Thematic Program on Mathematics in Quantum Information, The Fields Institute, Toronto, Canada, 2009.

Anya Tafliovich. A formal approach to quantum computing. Taming The Quantum World, Waterloo, Canada, June 2007.

Anya Tafliovich. Analyzing quantum algorithms: A formal approach. Institute for Quantum Computing, Waterloo, Canada, November 2006.

Anya Tafliovich. Quantum predicative programming. Mathematical Institute of the Academy of Sciences of the Czech Republic, Prague, Czech Republic, July 2006.

Teaching

10/2009–12/2009	Course Instructor, Accelerated Introduction to Computer Science
09/2009–12/2009	Course Instructor, Introduction to Computer Programming
05/2009–08/2009	Teaching Assistant, Principles of Programming Languages
01/2009–05/2009	Teaching Assistant, Principles of Programming Languages
05/2008–08/2008	Course Instructor, Principles of Programming Languages
01/2008–04/2008	Course Instructor, Principles of Programming Languages
09/2007–12/2007	Teaching Assistant, Principles of Programming Languages
01/2007–04/2007	Teaching Assistant, Mathematical Reasoning in Computer Science Teaching Assistant, Principles of Programming Languages
09/2006–12/2006	Teaching Assistant, Introduction to Theory of Computation
09/2005–05/2006	Teaching Assistant, Mathematical Reasoning in Computer Science
09/2002–12/2005	Teaching Assistant, Principles of Programming Languages

Personal Interests

Backpacking, canoeing, yoga, reading, cinematography, cooking

References

Available upon request