

# Anya Tafliovich — Curriculum Vitae

## Personal Data

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## Academic History

09/2004–06/2010 Doctor of Philosophy  
Department of Computer Science, University of Toronto, Canada  
Supervisor: Dr. Eric C. R. Hehner. (<http://www.cs.toronto.edu/~hehner>)

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

## Employment History

10/2010–current Lecturer, Department of Computer and Mathematical Sciences,  
University of Toronto Scarborough

05/2010–08/2010 Course Instructor, Principles of Programming Languages (CSC 324)

01/2010–05/2010 Course Instructor, Introduction to Computer Science (CSC 148)  
Course Instructor, Principles of Programming Languages (CSC 324)

10/2009–12/2009 Course Instructor, Accelerated Introduction to Computer Science (CSC 150)

09/2009–12/2009 Course Instructor, Introduction to Computer Programming (CSC 180)

08/2008–08/2009 Full-time mother

05/2008–08/2008 Course Instructor, Principles of Programming Languages (CSC 324)

01/2008–04/2008 Course Instructor, Principles of Programming Languages (CSC 324)

09/2007–12/2007 Teaching Assistant, Principles of Programming Languages (CSC 324)

01/2007–04/2007 Teaching Assistant, Mathematical Reasoning in Computer Science (CSC 165)  
Teaching Assistant, Principles of Programming Languages (CSC 324)

09/2006–12/2006 Teaching Assistant, Introduction to Theory of Computation (CSC 238)

09/2005–05/2006 Teaching Assistant, Mathematical Reasoning in Computer Science (CSC 165)

09/2002–12/2005 Teaching Assistant, Principles of Programming Languages (CSC 324)

05/2002–08/2002 Research Assistant, Software Engineering Group, University of Toronto

## Research Work

- Journal papers      A. Tafiiovich. Distributed quantum computing. In preparation, 2010.
- Conference papers    A. Tafiiovich and K. Ku. AI planning by multi-valued model-checking. In preparation, 2010.
- A. Tafiiovich and E.C.R. Hehner. Programming with quantum communication. In *Proceedings of the 7th ETAPS Workshop on Quantitative Aspects of Programming Languages (QAPL)*, volume 253(3) of *Electronic Notes in Theoretical Computer Science (ENTCS)*, York, UK, 2009. (Presenter).
- A. Tafiiovich. It's not magic: I can prove it. In *Proceedings of the GHC New Investigators*, Orlando, USA, 2007. (Presenter). Acceptance rate: 32%.
- A. Tafiiovich and E.C.R. Hehner. Programming telepathy: Implementing quantum non-locality games. In *Proceedings of the 10th Brazilian Symposium on Formal Methods*, Ouro Preto, Brazil, 2007. (Presenter). Acceptance rate: 32%. Invited for a special issue of Elsevier's *Electronic Notes in Theoretical Computer Science (ENTCS)*.
- A. Tafiiovich and E.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. (Presenter).
- M. Chechik, B. Devereux, S. M. Easterbrook, A. Gurfinkel, A. Lai, V. Petrovykh, A. Tafiiovich, and C. Thompson-Walsh.  $\chi$ chek: A model checker for multi-valued reasoning. In *Proceedings of the 25th International Conference on Software Engineering (ICSE)*, Portland, USA, 2003. Acceptance rate: 13%.
- Technical Reports  
and Theses            A. Tafiiovich. *Quantum Predicative Programming*. PhD thesis, University of Toronto, 2010.
- A. Tafiiovich. Quantum programming. Master's thesis, University of Toronto, 2004.
- A. Tafiiovich and A. Kress. Using grid solution methods for a POMDP formulation of Preference Elicitation problem. Technical report, University of Toronto, 2002.
- A. Tafiiovich and A. Misyura. Algorithms for solving matching problems involving floating point arithmetic. Technical report, University of Toronto, 2001.
- Refereed posters    A. Tafiiovich. On quantum non-locality. Grace Hopper Celebration of Women in Computing, Orlando, USA, 2007.
- A. Tafiiovich. Quantum predicative programming. 14th International Symposium on Formal Methods (FM), Hamilton, Canada, 2006.
- A. Tafiiovich. Formalizing quantum pseudo-telepathy games. 4th International Workshop on Quantum Programming Languages (QPL), Oxford, United Kingdom, 2006.
- A. Tafiiovich. Quantum programming. Quantum Information, Computation and Logic: Exploring New Connections, Perimeter Institute, Waterloo, Canada, 2004.

- Invited Talks
- A. Tafliovich. On writing correct quantum programs. Institute for Quantum Computing, Waterloo, Canada, November 2009.
  - A. Tafliovich. Predicative quantum programming. Canadian Quantum Information Student Conference, Thematic Program on Mathematics in Quantum Information, The Fields Institute, Toronto, Canada, August 2009.
  - A. Tafliovich. A formal approach to quantum computing. Taming The Quantum World, Waterloo, Canada, June 2007.
  - A. Tafliovich. Analyzing quantum algorithms: A formal approach. Institute for Quantum Computing, Waterloo, Canada, November 2006.
  - A. Tafliovich. Quantum predicative programming. Mathematical Institute of the Academy of Sciences of the Czech Republic, Prague, Czech Republic, July 2006.

### Major Academic Awards

- 09/2005–08/2007 Natural Sciences and Engineering Research Council of Canada (NSERC) Postgraduate Scholarship, PhD level  
Value: \$42,000 over two years
- 09/2005–08/2006 Ontario Graduate Scholarship (OGS) — declined  
Value: \$15,000
- 09/2004–08/2005 Natural Sciences and Engineering Research Council of Canada (NSERC) Postgraduate Scholarship, PhD level  
Value: \$21,000
- 09/2003–08/2004 Natural Sciences and Engineering Research Council of Canada (NSERC) Postgraduate Scholarship, Master’s level  
Value: \$17,300
- 09/2003–08/2004 Ontario Graduate Scholarship (OGS) — declined  
Value: \$15,000
- 09/2002–08/2003 Ontario Graduate Scholarship (OGS)  
Value: \$15,000

### Personal Interests

Backpacking, canoeing, yoga, reading, cinematography, cooking.

- References** Available upon request.