Biographical Sketch for Amr Sabry

Professional Preparation

- Cairo University, Egypt, Electronics & Computer Engineering, B.Sc. (1986)
- Cairo University, Egypt, Computer Engineering, M.Sc. (1989)
- Rice University, Computer Science, M.Sc. (1993)
- Rice University, Computer Science, Ph.D. (1994)
- Chalmers University, Sweden, Programming Languages, Postdoctoral researcher (1994-1995)

Appointments

- 2007-Present Professor, School of Informatics and Computing, Indiana University.
- 2000-2007 Associate Professor, Computer Science Department, Indiana University.
- Spring 2004 Visiting Professor, Genova University, Italy.
- Fall 2003 Visiting Researcher, Microsoft Research, Cambridge, UK.
- 1995-2000 Assistant Professor, Department of Computer and Information Science, University of Oregon.
- 1994-1995 Postdoctoral Researcher, Department of Computer Science, Chalmers University, Göteborg, Sweden.
- 1993-1994 Research Assistant, Rice University, visiting Carnegie Mellon University.
- 1989-1993 Research and Teaching Assistant, Rice University.
- 1987 Teaching Assistant, Polytechnic Military School, Egypt.
- 1986-1989 Research and Teaching Assistant, Cairo University, Egypt.
- 1986-1989 Programmer and Consultant, Pacer, Egypt.

Closely Related Publications

[1] Andrew J Hanson, Gerardo Ortiz, Amr Sabry, and Yu-Tsung Tai. "Discrete quantum theories". In: *Journal of Physics A: Mathematical and Theoretical* 47.11 (2014), p. 115305.

[2] Andrew J Hanson, Gerardo Ortiz, Amr Sabry, and Yu-Tsung Tai. "Geometry of discrete quantum computing". In: *Journal of Physics A: Mathematical and Theoretical* 46.18 (2013), p. 185301. Erratum "Corrigendum: Geometry of discrete quantum computing". In: *Journal of Physics A: Mathematical and Theoretical* 49.3 (2015), p. 039501.

[3] Juliana Kaizer Vizzotto, André Rauber Du Bois, and Amr Sabry. "The Arrow Calculus as a Quantum Programming Language". In: 16th International Workshop on Logic, Language, Information and Computation. (June 21–24, 2009). Tokyo, Japan, pp. 379–393.

[4] Thorsten Altenkirch, Jonathan Grattage, Juliana K. Vizzotto, and Amr Sabry. "An Algebra of Pure Quantum Programming". In: Proceedings of the 3rd International Workshop on Quantum Programming Languages. (June 30–July 1, 2005). Ed. by Peter Selinger. Chicago. Final version "An Algebra of Pure Quantum Programming". In: *Electronic Notes in Theoretical Computer Science* 170 (2007), pp. 23–47.

[5] Juliana K. Vizzotto, Thorsten Altenkirch, and Amr Sabry. "Structuring quantum effects: superoperators as arrows". In: *Mathematical Structures in Computer Science* 16.3 (June 2006), pp. 453–468.

Other Significant Publications

[1] Jacques Carette and Amr Sabry. "Computing with Semirings and Weak Rig Groupoids". In: Proceedings of the 25th European Symposium on Programming Languages. (Apr. 2–8, 2016). Eindhoven, Netherlands.

[2] Roshan P. James and Amr Sabry. "Information Effects". In: Proceedings of the 39th Annual ACM SIGPLAN-SIGACT Symposium on Principles of Programming Languages. (Jan. 25–27, 2012). Philadelphia, PA, USA.

[3] Amr Sabry. "Side Effects". In: *Wiley Encyclopedia of Computer Science and Engineering*. Ed. by Benjamin W. Wah. Vol. 4. 5 vols. Hoboken: John Wiley & Sons, Inc., 2009, pp. 2534–2543.

[4] E. Moggi and Amr Sabry. "Monadic encapsulation of effects: a revised approach (extended version)". In: *Journal of Functional Programming* 11.6 (Nov. 2001), pp. 591–627.

[5] Cormac Flanagan, Amr Sabry, Bruce F. Duba, and Matthias Felleisen. "The Essence of Compiling with Continuations". In: *Proceedings of the ACM SIGPLAN 1993 Conference on Programming Language Design and Implementation*. PLDI '93. Selected as one of the best 50 PLDI papers from 1979-1999. Albuquerque, New Mexico, USA: ACM, 1993, pp. 237–247.

Synergetic Activities

Paul Purdom and Amr Sabry, CNF Generator for Factoring Problems. Software system to generate satisfiability problems used in the SAT competition organized in conjunction with the Sixth International Conference on the Theory and Applications of Satisfiability Testing, March 2003, and continually used by designers of SAT solvers worldwide. Available online at `http://www.cs.indiana.edu/cgi-pub/sabry/cnf.html`.