

VASIL S. DENCHEV

vdenchev@purdue.edu

EDUCATION

PhD Student in Computer Science

August 2006 to present

Purdue University

- Completed qualifying process
- Research interests: quantum computing, distributed network algorithms, machine learning
- GPA: 3.88/4.00

Bachelor of Science

May 2006

State University of New York, College at Brockport

- Triple major in Computer Science, Computational Science, and Mathematics
 - GPA: 3.97/4.00
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PUBLICATIONS

- H. Neven, V. S. Denchev, G. Rose, and W. G. Macready, "Training a Binary Classifier with the Quantum Adiabatic Algorithm," Nov 2008, arXiv:0811.0416v1.
 - V. S. Denchev and G. Pandurangan, "Distributed Quantum Computing: A New Frontier in Distributed Systems or Science Fiction?" in ACM SIGACT News, Vol. 39, No. 3, Sept 2008.
 - Zavriyev, A. Leverrier, V. S. Denchev, and A. Trifonov, "Improving the Performance of Quantum Key Distribution Apparatus," in Special Issue (Single Photon) of the Journal of Modern Optics, Vol. 54, Nos. 2-3, Jan. 2007, pp. 305-314.
 - V. S. Denchev, A. Trifonov, A. Zavriyev, and A. Leverrier, "Stabilization of a Single-Photon Interferometer for One-Way Quantum Key Distribution Systems," in Proceedings of the National Conference on Undergraduate Research, University of North Carolina at Asheville, Sept. 2006, pp 2366-2373.
 - V. S. Denchev and M. Z. Tahar, "Measurement and Control System with an Embedded Microcontroller," in Advancing Computing and Information Sciences, Rochester Institute of Technology, Oct. 2005, pp. 103-108.
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EXPERIENCE

Google, Inc.

June to September 2008

Software Engineer Intern

- Training a binary classifier for adiabatic quantum computing

Purdue University

August 2006 to present

Teaching Assistant

- Recitation instructor: in-class teaching, designing/grading labs, projects, and exams
- Help Desk manager: organizing and managing a team of assistants to provide supplemental project help for students enrolled in selected undergraduate CS courses

MagiQ Technologies, Inc.

June to September 2005 and December 2005 to January 2006

Research Intern in Quantum Cryptography

- Single-photon interferometer stabilization with active phase tracking
- Implementation of the BB84 QKD protocol on a one-way system using stabilization
- LabView implementation of FPGA I/O interface for BB84 QKD protocol
- Characterization system for single-photon detectors with GPIB interfacing

State University of New York College at Brockport

August 2002 to May 2006

Research Assistant

- Embedded system for experimental measurement and control in cryogenic physics

Teaching Assistant/Tutor

- Tutoring students, facilitating study groups, grading homework, and assisting in labs in various Computer Science and Math courses

HONORS AND AWARDS

- Upsilon Pi Epsilon International Computer Science Honor Society, Spring 08
- Graduate Student Award for Outstanding Teaching, Spring 08
- SUNY Chancellor's Award for Student Excellence, Spring 06
- Edward L. Davis Award, Spring 06
- Sigma Pi Sigma National Physics Honor Society, Spring 06
- Sigma Xi Undergraduate Research Award in Physics, Spring 06
- President's list, Fall 05-Spring 06
- Departmental Scholar in Computer Science, Spring 06
- Departmental Scholar in Mathematics, Spring 06
- Departmental Scholar in Computational Science, Spring 05
- Delta College Commendation Award, Spring 05
- Sigma Xi Undergraduate Research Award in Computer Science, Spring 05
- Alpha Chi National College Honor Society, Fall 04-Spring 06
- Office of Campus Life Student Leadership Award, Spring 04
- Computational Science Departmental Award, Spring 04-Spring 06
- Computer Science and Mathematics Departmental Award, Spring 04
- Brockport Alumni Association Current Student Award, Fall 03-Spring 04
- Interdisciplinary Award in Mathematics, Fall 03-Spring 04
- Dean's list, Fall 02-Spring 05
- Distinguished Scholar in Residence, Fall 02-Spring 06
- Scholar Recognition Award, Fall 02-Spring 06

ACTIVITIES

- President of Upsilon Pi Epsilon International Computer Science Honor Society, Purdue University Chapter, 08-09
- President of Alpha Chi National College Honor Society, NY Omicron chapter, 05-06
- Student speaker at SUNY Brockport's Convocation Ceremony, Fall 05.
Video: <http://www.cs.purdue.edu/homes/vdenchev/convocation.mpg>
- Model for SUNY Brockport 2005-2006 Undergraduate Recruitment Campaign.
Advertisement published in regional issues of Time, Newsweek, US News, People, and Sports Illustrated. <http://www.cs.purdue.edu/homes/vdenchev/brockport.pdf>
- ACM International Collegiate Programming Contest, SUNY Oswego, Fall 05
- Computational Science Club, Computer Science Club, Programming Team, 03-06
- Volunteer work for open houses and recruitment, 03-06

References Available Upon Request