

# **Curriculum Vitae**

**Darcy G. Benoit**

Jodrey School of Computer Science  
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## **Education:**

- 1997-2003      PhD, School of Computing, Queen's University, Kingston, Ontario.
- 1995-1997      MSc, Department of Computing and Information Science, Queen's University at Kingston, Kingston, Ontario
- 1991-1995      BSc Honours, Department of Mathematics, Computing and Information Systems, St. Francis Xavier University, Antigonish, Nova Scotia

## **Personal Continuing Education:**

- Canadian Council for the Advancement of Education: Development for Deans and Academic Leaders, 2 December 2014 (Halifax)
- Leadership Development for Department Heads & Academic Administrators, 29 November 2013. (Mt. Allison University, U4 League – Facilitator: Sheila A. Brown)
- Environmental Systems Research Institute, Inc. (ESRI) Canada Certificate, Introduction to ArcGIS I, January 2006.
- UPEI Faculty Development Summer Institute 2004. (A week-long course in active learning techniques.)
- Good Teaching Practices, January 2004. (AITT short course)
- Dynamic Classrooms, January 2004. (AITT short course)

## **Awards:**

### Funding:

- Irving Research Grant, 2015-2016, \$7,700 (Plants of Nova Scotia App)
- IRAP BIAP (with Colibri Software), 2015, \$46,600 (extensions to Strollopia)
- IRAP BIAP (with JCN Performance Consulting), 2015, \$46,200 (porting the Mapability app from the web to the app store)
- Productivity and Innovation Voucher (with Colibri Software), 2014-2015, \$25,000 (geolocation spray information for farmers)
- Productivity and Innovation Voucher (with Frostbyte Interactive), 2013-2014, \$15,000
- SSHRC Group Research Grant (Primary Investigator – Janice Best; Collaborators – Darcy Benoit, Paula Rockwell, Leigh Whaley), “Secrets and Scandals: Political Censorship of Vaudeville Theatre in 19<sup>th</sup> Century France”, 2013-2017, \$83,952 (total).
- NSERC Engage Grant, 2012, (Instrument Effects on Mobile Devices, w/ Stomp Labs), (\$24,952)
- SSHRC Group Research Grant with “4A” Status, 2012 (\$0) (“4A” – fundable but not funded)
- Acadia University Research Award, 2011, (\$3500) (Building Recognition Software for Mobile Devices)
- Acadia University Research Award, 2010, (\$1750) (Tracking the Size of the Web)
- Acadia University Research Award, 2009, (\$3000) (Tracking the Size of the Web)
- Acadia Teaching and Learning Enhancement Award, 2009, (Creating a Corpus of Material for the Mobile and Ubiquitous Computing Stream) (\$18,275.40)
- InNOVAcorp Award, 2007-2008, (Intelligent Calendar Management System) (\$10,000, with Elhadi Shakshuki)
- NSERC Discovery Grant, 2006-2009, (3 years, \$11,500/year)
- NSERC Discovery Grant, 2004-2006 (Automating Database Resource Management) (2 years, \$12,000/year)
- Acadia University Research Award, 2006 (\$2,500)
- Acadia University Research Award, 2003 - (\$2,354) (Determining Hardware Effects on DBMS Performance)
- Teaching Improvement and Innovation Fund, 2005 (Evaluation of Tablet PCs for Teaching), (\$18,571, with Drs. Shakshuki, Clarke and Haynes)
- New Faculty Research Grant, 2002 (\$7,000)

Teaching/Professional:

- Professor of the Year, Jodrey School of Computer Science, 2006-2007 (with Dr. Jim Diamond)
- ASU Teaching Recognition Award, 2004-2005
- Professor of the Year, Jodrey School of Computer Science, 2004-2005
- Professor of the Year, Jodrey School of Computer Science, 2003-2004
- Professor of the Year, Jodrey School of Computer Science, 2002-2003 (with Dr. Rick Giles)

Contracts:

- IRAP contract for Multi-Line Product Services, 2006-2007

Student:

- PhD Fellowship, IBM Canada, 1997-2000
- Graduate Scholarships, Queen's University, 1995-2001
- Teaching Assistant of the Year, Queen's University 1999-2000
- Entrance Scholarship, St. Francis Xavier University, 1991

## **Employment History:**

**Director**, Jodrey School of Computer Science, Acadia University, July 2014 – present.

**Acting Director**, Jodrey School of Computer Science, Acadia University, July 2012 - June 2013, September 2013 – June 2014.

**Associate Professor**, Jodrey School of Computer Science, Acadia University, 2007-present.

**Assistant Professor**, Jodrey School of Computer Science, Acadia University, 2003-2007.

**Lecturer (tenure track)**, Jodrey School of Computer Science, Acadia University, 2002-2003.

**Research Assistant**, Department of Computing and Information Science, Queen's University, 1996-2001

**Teaching Assistant**, Department of Computing and Information Science, Queen's University, 1995-2001.

**Database Administrator / Software Developer**, MediaShell Corporation, Kingston, Ontario, Canada, July 2000 – September 2001.

**Java Instructor**, Queen's University Mini Enrichment Courses, May 2000, 2001 and 2002.

**Research Position**, IBM Center for Advanced Studies, Toronto Lab, IBM Canada, summer 1997, 1998

**Research Position**, Canada Institute for Scientific and Technical Information, Scientific Numeric Database Section, National Research Council Canada, May-September 1995

**Teaching Assistant**, Department of Mathematics, Computing and Information Systems, St. Francis Xavier University, 1994-1995

**Research Assistant**, Department of Mathematics, Computing and Information Systems, St. Francis Xavier University, 1994

## **Students**

### **Graduate Students:**

#### ***- In Progress***

1. Xiaoming Pan – Global Event Predictor (with Dr. André Trudel)
2. Ping-Yu (Allen) Huang – Mobile application for collection of biological field data
3. Scott Durno – Exact XML Compression (with Dr. Tomasz Müldner)
4. Matthew Winchester – Distributed Data Collection
5. Tyler Corbin – (with Dr. Tomasz Müldner)

#### ***- Completed***

6. Md Saroer-E Azam – Measuring the Accuracy of a High Speed Port Scanner to Perform a Web Census (Co-supervision with Dr. André Trudel) (2015)
7. Azadeh Kashian – Web Census iPad Application (Co-supervision with Dr. André Trudel) (2012)
8. Ashif Yousuf – Energy Efficient Data Gathering for Wireless Sensor Networks (Co-supervision with Dr. Sajid Hussain) (2011)

9. Peng (Robin) Luo – Mapping Domain Names to IP Addresses (Co-supervision with Dr. Andre Trudel) (2011)
10. Md Shafayat Rahman (Fahim) – Multipath Key Reinforcement Schemes for Wireless Sensor Networks (Co-supervision with Dr. Sajid Hussain) (2010)
11. Lin Zhang – Web Server Classification Using the Multinomial Naïve Bayes Algorithm (2010)
12. Qui (Raymond) Zhuohui – Autonomically Scheduled Incremental Checkpoint (ASIC) in Derby (2009)
13. Lehe (Amanda) Cai – Language Identification on the WWW (2009)
14. Fei Wang – Internationalization of Faculty Websites Using XML (2004)

## **Honours Students (COMP 4996)**

### ***- In Progress***

2014-2016

1. Mike Samson – Developing a historical campus walking app for iOS.

### ***- Completed***

2013-2014

1. Yichuan (Aven) Xu – Development of a User-Friendly Interface and Database to Increase Waste Packaging Recycling (co-supervised with Dr. Paul Arnold)

2012-2013

2. Kyle Reid – An intelligent builder for Web Sprites
3. Jacob Bruce – Development and Adaptation of the Newradial Web Application to Arbitrary Data Sources (Co-supervision with Rick Giles and Jon Saklofske)
4. Tyler Corbin – Parallelization of XML Compressor: XSAQCT (with Tomasz Müldner)

2011-2012

5. Charlie Greene – iAcadia v2.0, Mobile Application Development

2010-2011

6. Ryan Wooden – An iOS application for Acadia University - iAcadia

2008-2009

7. Jaroslav Bosak – Database File System

2006-2007

8. Travis DeWolf – Properties of Template-Guided DNA Recombination (with Dr. Mike Domaratzki)

2005-2006

9. Stephen Fitch – Implementing In-Memory Back End Storage in a Relational Database Management System
10. Devin Slauenwhite – A Web Census is Possible
11. Philip Wilder – Delving into Derby: Investigating an Open-Source Database Management System

## **Project Students (COMP 4983)**

### ***- In Progress***

1. Nicholas Hines – (on hold)

### ***- Completed***

2014-2015

1. Timothy Cooper – An alternative VoIP Client for your terminal
2. Michael Neynens – Analyzing and Using Fantasy Football Predictions
3. Lourens Schep – Stalling Snapshot Observation System replaced by iPad application
4. Tellis Bethel – Beaver: An Audio Fingerprinting Application for Real-time Synthesizers
5. Zach Bearinger – Evaluating Battle Equations in Turn-Based Battle Simulations
6. Hua Chen – Implementing iOS applications in Swift
7. Samuel Coleman – Garrit: An Online Automated Code Judging System
8. Keegan Francis – An Online Point of Sale / Stock System for EOS Foods
9. Thomas Hadlaw – Hush Text: An encrypted SMS texting application

10. Tracey Laurence – A Secret Weapon in the competitive Arsenal: Driving Competitiveness through the Service Desk
  11. Guangle Shi – Porting iAcadia to iOS 8
  12. Qianli Shu – An Alcohol Consumption Tracking Application for Android
  13. Yang Wang – Protecting Your Neck: An Android App to Prevent Neck Strain
- 2013-2014
14. Yu He – An Online Schedule Maker
  15. Kate-Lynn MacPhail – Collecting Web Data
- 2013-2014
16. Gabriel Both – Reducing Grocery Bills – A Grocery List Website
  17. Amanda Drost – Online accessibility – Standards and Implementation
- 2012-2013
18. Michael Stevenson – Implementing iAcadia for Android Smartphones
  19. Peijun (Phil) Chen – u-ride.ca
  20. Xu (Barry) Han – u-ride.ca
  21. Xiang (Harry) Li – iOS Alcohol Consumption Tracker
  22. YiMing (Matt) Lu – iOS Alcohol Consumption Tracker
  23. Justin Haynes – Agriculture and Agri-Food Canada Network Audit (Kentville)
  24. Gabriel Rigg – Interacting with the Mobile Environment Using Gesture Recognition and the Nintendo WiiMote.
- 2011-2012
25. Jeffery Doucet – Implementing iAcadia for Android Smartphones
  26. Cody Davison – A Land Battle game for iOS
- 2010-2011
27. Dylan Boates – More Efficient Web Census Data Collection
  28. Matthew Winchester – Multiplayer RPG using the Unity Engine
  29. Hector Cruz-David Jr. – Online Acadia University Intelligent Fee Calculator
  30. Masashi Kobayashi – iPhone Client for Google Blogger
- 2009-2010
31. Lin Liang – Gender-based author classification of web pages
  32. Morgan Lightbourne – PageRank for Web Census Front Pages
  33. Zach Taylor – Tracking book prices online
  34. Nicholas Niemi – Syncing iPhone Databases (with Elhadi Shakshuki)
- 2008-2009 (I was on sabbatical this year)
35. Joseph O’Neill – Web Census Project
- 2007-2008
36. Susan Ramsarran – Web Census Project
  37. Curtis McCarthy – Web Census Project
  38. Alan Dyer – Web Census Project
  39. Zheng Zhong – Online Library Management System
  40. Chris Elliot – Mining Web Census Data
  41. William Logan – An Online Graduate Evaluation Form
- 2006-2007
42. Zhi Hao (Wally) Wang – Online Faculty Publication Tracking System
  43. Roger Haynes – The Canadian Internet: 10 Years Later
  44. Andrew Marshall – Web Census Project
  45. Yufeng (A.J.) Guo – Palm Quiz Project
  46. James Griffin-Allwood – Visualization of the Web
- 2005-2006
47. Shafayet Chowdury – Online Conference Tracking System
  48. Brian Copeland – Online Dental Appointment Scheduling System
  49. Scott MacDonald – Adding Drop and Rename Column Features to the Derby DBMS
  50. Nick Schofield – Measuring the Size of the Web
  51. Man (Victor) Chan – Online Querying of Web Census Data

2004-2005

52. Mahamudul Hasan – Schedule and Salary Maintenance Database
53. Matt Parsons – Derby Workload Performance Testing
54. Layla Rashid – Airline Reservation System
55. Robert Samson – Intelligent Troubleshooting System for Industry
56. Sean Sullivan – The Acadia Faculty Scheduler
57. Mengqiu Zhu – Online Library Book Ordering System

2003-2004

58. Christopher Lalonde – Military Tracking Database
59. Huang Si Wei (Anson) – E-Commerce Web Software
60. Ryan Young – Home Business Expense Tracking Database
61. Timothy Fletcher – The Electronic Course Evaluation Survey System
62. Kristopher Terrio – The Electronic Course Evaluation Survey System
63. Jason Harley – XML Native Databases
64. Dan Maher – Online Barcode Database

2002-2003

65. Brian Sheppard – Small Business Inventory System
66. James Jentsung Hsu – XML Databases
67. Matthew Purdy – Online Fantasy Football System
68. Sean Walsh – Online Help Desk Software

## **Research Students – Employed**

2012 (Summer)

1. Nicholas Hines – A Second Census of the Web

2011 (Summer)

2. Charlie Greene – iAcadia Project (25.55, Open Acadia)

2010 (Summer)

3. Dylan Boates – Web Census Project (25.55, summer student)
4. Ryan Wooden – iAcadia Project (startup fund, summer student)

2010 (Winter term)

5. Dylan Boates – Web Census Project (NSERC, winter term)
6. Alexander Sanford – Mobile Computing Project (NSERC, winter term)
7. Ryan Wooden – Mobile Computing Project (NSERC, winter term)

2009

8. Dylan Boates – Web Census Project (25.55 and NSERC)
9. Alexander Sanford – Mobile Computing Project (TLEA)
10. Ryan Wooden – Mobile Computing Project (TLEA)
11. Gabriel Rigg – Hand Gesture Interface Project (NSERC)

2008

12. Joseph O’Neill – Web Census Project (25.55 & NSERC)
13. Jaroslav Bosak – Database File System Project (HSRA and NSERC)

2007

14. Joseph O’Neill – Intelligent Calendaring Project (inNOVAcorp)
15. Alexander Greenough – Intelligent Calendaring Project (inNOVAcorp)

2006

16. Nick Schofield – Web Census Project (25.55 & NSERC)

2005

17. Devin Slauenwhite – Web Census Project (HSRA & NSERC)
18. Philip Wilder – Derby DBMS Project (Summer NSERC & NSERC)
19. James Griffin-Allwood – Tablet PC Project (TIIF)
20. H. Mauricio Duarte-Neira – Tablet PC Project (TIIF)
21. Angela MacKenzie – Tablet PC Project (TIIF)

2004

22. Kamin MoradHassel – Autonomic Computing Project (NSERC)

## **Refereed Publications:**

(Note: The names of students appear in **bold**.)

### **Journal**

- [1] Shakshuki, E., **Koo, H.**, Benoit, D.G. and Silver, D.L. A Distributed Multi-agent Meeting Scheduler. *Journal of Computer and System Sciences*, Elsevier Publishers, special issue on Web and Mobile Information Systems, Volume 74, Issue 2, pp 279-296, March 2008.
- [2] Benoit, D and Trudel, A., World's First Web Census, *International Journal of Web Information Systems*, Volume 3, Number 4, Emerald Group Publishing, p. 378-389, 2007.
- [3] Benoit, D.G., **Slauenwhite, D.**, **Schofield, N.**, and Trudel, A., World's First Class C Web Census: The First Step in a Complete Census of the Web, *Journal of Networks*, Academy Publishers (ISSN 1796-2056), Vol. 2, Issue 2, pp. 45-56, April 2007.

### **Conference**

- [4] Benoit, D., **Buote, L.**, and **Linkletter, E.** Examining the Effect of Screencasts Lectures on Class Attendance, *Proceedings of the AAU Teaching Showcase 2013*, Mount Allison University, Sackville, NB, October 26, 2013, pp23-36.
- [5] Kashian, A., Benoit, D.G., and Trudel, A. An iPad Application for Viewing IP Addresses which Host a Publicly Accessible Web Server, *Fifth International Conference on Internet Technologies and Applications (ITA 13)*, Wrexham, UK, September 10-13, 2013. (Note: **Best Paper Award**)
- [6] Benoit, D.G., **Luo, P.**, and Trudel, A. An IP address based study of .com and .net domain names. *Fourth International Conference on Internet Technologies and Applications (ITA 11)*, Wrexham, UK, September 6-9, 2011.
- [7] Benoit, D.G. and Trudel, A., A Visualization of all the IP Addresses that Host a Publicly Accessible Web Server, *International Conference on Internet Technology and Applications (iTAP 2010)*, Wuhan, China, 21-23 August, 2010.
- [8] Benoit, D.G., Trudel, A. and **Cai, L.**, Classification of Web Servers by Geographical Location, *Third International Conference on Internet Technologies & Applications*, Wrexham, North Wales, UK, 8-11 September, 2009.
- [9] **Xing, X.**, Shakshuki, E., and Benoit, D., Security Analysis and Authentication Improvement for IEEE 802.11i Specification, *IEEE Globecom 2008 Computer and Communications Network Security Symposium*, New Orleans, USA, 30 Nov – 4 Dec, 2008.
- [10] Benoit, D.G., **Slauenwhite, D.**, and Trudel, A., On the Path to a World Wide Web Census: A Large Scale Survey, *Second International Conference on Internet Technologies & Applications*, Wrexham, North Wales, UK, 4-7 September, 2007, pp 354-363.
- [11] Benoit, D.G., Performance Diagnosis for Changing Workloads, *The Third International Conference on Autonomic and Autonomous Systems*, Athens, Greece, June 19-25, 2007.
- [12] Shakshuki, E., **Koo, H.**, and Benoit, D.G., Negotiation Strategies for Agent-Based Meeting Scheduling Systems. *4<sup>th</sup> International Conference on Information Technology: New Generations*, April 2007, Las Vegas, USA.

- [13] Benoit, D.G. and Shakshuki, E., “Evaluation and Use of Tablet PCs at Acadia University”, The 7th International Conference on Information Technology Based Higher Education and Training (ITHET’06), IEEE Computer Society, July 10 – 13, Sydney, Australia, 2006, pp 262-271.
- [14] Benoit, D.G. and **Wilder, P.** “The Open-Source Impact on Software Standards: A Case Study”, 2nd International Advanced Database Conference (IADC 2006), San Diego, CA June 27-29, 2006, pp 13-17.
- [15] Benoit, D.G. and Shakshuki, E. “Experience and Evaluation in Using Tablet PCs at Acadia University”, ED-MEDIA World Conference on Educational Multimedia, Hypermedia & Telecommunications, Orlando, Florida, June 26-30, 2006, pp 1461-1468.
- [16] Benoit, D.G., **Slauenwhite, D.** and Trudel, A. “A Web Census is Possible”, Proceedings of the International Symposium on Applications and the Internet (SAINT 06), Phoenix, Arizona, January 2006, pp 39-44.
- [17] Benoit, D.G. “Automatic Diagnosis of Performance Problems for Shifting Workloads in Database Management Systems”, International Advanced Database Conference, San Diego, California, June 27-30, 2005, pp 90-95.
- [18] Benoit, D.G. “Automatic Diagnosis of Performance Problems in Database Management Systems”, Proceedings of the Second International Conference on Autonomic Computing (ICAC 05), Seattle, Washington, June 13-16, 2005, pp326-327 (Short paper and poster).
- [19] Müldner, T., Benoit, D., and **Wang, F.** “Generic Approach to Internationalization of Websites”, The 8<sup>th</sup> IASTED International Conference on Software Engineering and Applications (SEA 2004), Cambridge, MA, USA, November 2004, pp 465-470.
- [20] Benoit, D., and Müldner, T. “IDUX: Internationalization of Data Using XML”, IADIS International Conference WWW/Internet 2004, Madrid, Spain, October 2004, pp 469-476.
- [21] Martin, P., Powley, W., and Benoit, D. “Using Reflection to Introduce Self-Tuning Technology into DBMSs”, 8<sup>th</sup> International Database Engineering & Applications Symposium, Coimbra, Portugal, July 2004, pp 429-438.
- [22] Müldner, T., **Wang, F.** and Benoit, D. “My Webpage Can Speak Many Languages”, World Conference on Educational Multimedia, Hypermedia and Telecommunications (ED-MEDIA), Lugano, Switzerland, June 2004, pp 2040-2046.
- [23] Scheugraf, Ernst J., and Benoit, Darcy G., “Thesaurus Assisted Automatic Indexing of Document Databases”, Proceedings of the Tenth International symposium on Computer and Information Sciences, Volume II, editors A.E. Harmanci, E. Gelenbe and B. Öencik, pp 239-246, October 1995.

### **Workshop**

- [24] Benoit, D.G. “Automatic Performance Diagnosis for Changing Workloads in DBMSs”, IEEE International Workshop on Trusted and Autonomic Computing Systems, Vienna, Austria, April 2006, pp 509-513.
- [25] Elnaffar, S., Powley, W., Benoit, D. and Martin, P. “Today’s DBMSs: How Autonomic Are They?”, First International Workshop on Autonomic Computing Systems, Prague, September 2003, pp 651-655.
- [26] Benoit, Darcy G., “Automated Diagnosis and Control of DBMS Resources”, Conference on Extending Database Technology (EDBT) PhD Workshop, Konstanz, Germany, March 2000.



**Other**

- [27] Price, E.L. and Benoit, D.G., *The Challenges of Conducting Anonymous Longitudinal Online Research*, 2007 Annual Convention of the Canadian Psychological Association, Ottawa, Ontario, 7-9 June, 2007 (Published Abstract. Symposium presentation by Dr. Price)
- [28] Benoit, Darcy G., “Automatic Diagnosis of Performance Problems in Database Management Systems”, PhD Thesis, School of Computing, Queen’s University at Kingston, Canada, 2003.
- [29] Benoit, Darcy G., “Dynamic Extensions for Educational Hypermedia”, MSc Thesis, Queen's University at Kingston, Canada, 1997.
- [30] Benoit, Darcy G., “Automatic Indexing Using a Thesaurus”, Honour’s Thesis, Department of Mathematics and Computer Science, St. Francis Xavier University, April 1995.
- [31] Benoit, Darcy G., “Wordnet and its Uses”, APICS Annual Computer Science Conference Proceedings, pp 20-29, October 1994.

**Presentations**

- [32] Johnson, A., Boulos, P., McDonald, J., Lockett, M., McSweeney, J., Benoit, D. “Ethical Potluck: Serving You Two Days in the Life of an Educational Developer”, Educational Developers Caucus 2017 – (re)Thinking Tradition, University of Guelph, Guelph, Ontario, February 22-24, 2017.
- [33] McSweeney, J., and Benoit, D.. “Investigating the Professional Conduct of Educational Developers in Canadian Post-Secondary Institutions”, AAU Teaching Showcase 2016, University of New Brunswick in Saint John, Saint John, New Brunswick, October 15, 2016.
- [34] Benoit, D. G., “Assessing the Impact of Electronic Course Materials on Attendance”, AAU Teaching Showcase 2013, Mount Allison University, Sackville, New Brunswick, October 26, 2013.

**Non-Refereed Material:**

**Technical Reports:**

- [35] Müldner, T., Wang, F. and Benoit, D., Internationalization of Websites, Technical Report TR-2004-01, Jodrey School of Computer Science, Acadia University, Nova Scotia, Canada, February 2004.
- [36] Elnaffar, S., Powley, W., Benoit, D. and Martin, P., Today’s DBMSs: How Autonomic Are They? Technical Report 2003-469, Queen’s University at Kingston, Ontario, Canada, September 2003.

**Submitted Papers / Proposals:**

**Papers in Progress:**

**Posters:**

1. Tablet-based PCs for Interactive Lectures and Note-taking, 2<sup>nd</sup> Engaged Learning Symposium, Acadia University, October 6-7, 2006.
2. Automatic Diagnosis of Performance Problems in DBMSs, CITO Research Review, 1 May 2001

3. Diagnosis and Automatic DBMS Tuning, CASCON 2000
4. Diagnosis and Automatic DBMS Tuning, CanDB/IRIS 2000 (Second annual Canadian Database Research Workshop, 12 Nov 2000, Institute for Robotics and Intelligent Systems)
5. Benoit, D. Automatic Diagnosis of DBMS Performance Problems, CITO Research Review on Information Systems and Management, May, 2000.
6. Self-Tuning DBMSs – Automatic Diagnosis Algorithms, CASCON 1999
7. Goal-Oriented Resource Management, CASCON 1997

### **Talks and Presentations:**

1. **Computational Thinking: Investing in our Future**, Windsor Rotary Club, 30 November 2013
2. **Professional Development Summit 2011**, “Expanding your business to mobile devices”, Saint Mary’s University, Halifax, 4 May 2011.
3. **Canadian Information Technology Professionals Speaker**, “How Big is the Web? What does it look like?”, CIPS NS September Meeting, September 2010 (with Dr. Andre Trudel)
4. **Teaching and Learning Symposium 2010**, “Creating a corpus of material for the Mobile and Ubiquitous Computing Stream”, TLEA Awards presentation, Acadia University, 22 January 2010.
5. **Public Presentation:** “World’s First Picture of the Entire Web”, Acadia University, June 2009
6. **Science Outreach Presentation:** “Computer Science – What’s it all about?”, Acadia University, May 2009.
7. **Seminar:** “World’s First Web Census” Jodrey School of Computer Science, Acadia University, March 2007.
8. **Seminar:** “Size Matters: Can the Web be Measured?” School of Computing, Queen’s University, July 2006.
9. **Panelist:** Integrating Networking and Databases, International Advanced Database Conference, San Diego, California, June 2005.
10. **Invited Talk:** Benchmarks and Automated Tuning with DB2/UDB, CASCON 2000

### **Professional Development:**

1. Taught two 2-day workshops for elementary school teachers from the AVRSB to learn computer programming, Acadia University, August 29<sup>th</sup> – September 1<sup>st</sup>, 2016
2. Taught a professional development session on computer programming for elementary school teachers, Annapolis East Elementary School in Middleton, NS, September 30<sup>th</sup>, 2016.

### **Software:**

#### **iAcadia:**

- Published on 30 September 2010 (As of May 2012, 3497 total downloads, 835/1545 d/u for v2.0)
- Article in The Athenaeum (Issue 73.02, 18 Sept 2010, Page 5)
- Acadia University Press Release, 12 October 2010
- Live at 5 News segment – Aired 19 October 2010
- Article in The Kings County Advertiser, 25 October 2010, Page 31
- Article in the Acadia Bulletin Alumni Magazine, Fall 2010, Page 8

### **Research Related Service and Memberships:**

#### **Memberships**

- Society for Teaching and Learning in Higher Education (STLHE) Ethical Principles for Educational Development Practice Action Group (2017 – present)
- Computer Science Teacher Association – International Committee (2017-present)
- Computer Science Teacher Association – Nova Scotia Chapter, 2016-present (founder)
- Computer Science Teacher Association, 2015-present

### **Organization**

- Workshop Organizer - Second IEEE International Workshop on Cooperative Distributed Systems, in conjunction with the 28<sup>th</sup> International Conference on Distributed Computing Systems, Beijing, China, 17-20 June, 2008.
- Workshop Organizer - The 2nd International Workshop on Intelligent Systems Techniques for Ad hoc and Wireless Sensor Networks (IST-AWSN'07), in conjunction with The Fifth International Symposium on Parallel and Distributed Processing and Applications, Niagara Falls, Canada, 28 Aug - 1 Sept, 2007.
- Workshop Organizer - First IEEE International Workshop on Cooperative Distributed Systems, in conjunction with the 27<sup>th</sup> International Conference on Distributed Computing Systems, Toronto, Canada, 25-29 June, 2007.
- Conference Co-Chair - 29<sup>th</sup> Annual Atlantic Provinces Council on the Sciences (APICS) Mathematics, Statistics and Computer Science Conference, Wolfville, Nova Scotia, October 21-23, 2005.

### **Editorial Boards**

- Journal of Ubiquitous Systems and Pervasive Networks, Published by the International Association for Sharing Knowledge and Sustainability.

### **Program Committee**

- 4<sup>th</sup> International Conference on Simulation and Modeling Methodologies, Technologies and Applications (SIMULTECH 2014), Vienna, Austria, 28-30 August, 2014.
- Fourth International Conference on Internet Technologies & Applications (ITA 11), Glyndwr University, Wrexham, North Wales, UK, September 6-9, 2011.
- The Fourth International Conference on Autonomic and Autonomous Systems (ICAS 2008), Gosier, Guadeloupe, March 16-21, 2008.
- First International Workshop on Knowledge Management and Discovery for Ubiquitous and Pervasive Applications (KUPA'07), Regensburg, Germany, September 3<sup>rd</sup>-7<sup>th</sup>, 2007.
- The Third International Workshop on Web and Mobile Information Services (WAMIS'07), Niagara Falls, Canada, May 21<sup>st</sup>-23<sup>rd</sup>, 2007.
- The Second International Conference on Availability, Reliability and Security, Vienna, Austria, April 10<sup>th</sup>-13<sup>th</sup>, 2007.
- First International Workshop on Intelligent Agents in Wireless Sensor Networks, in conjunction with the IEEE/WIC/ACM International Conference on Intelligent Agent Technology, Hong Kong, December 18 - 22, 2006.
- The 2nd IEEE International Symposium on Dependable, Autonomic and Secure Computing (DASC'06), Indiana University, Purdue University, Indianapolis, USA September 29-October 1, 2006.
- First International Workshop Intelligent Agents in Wireless Sensor Networks (IA-WSN), Hong Kong, December 18-22, 2006.
- The 2<sup>nd</sup> International Conference on Embedded Software and Systems, NPU, Xi'an, China, December 16-18, 2005.

### **NSERC Reviewer**

- Reviewed a Strategic Project Grant for NSERC, 2006.
- Reviewed a Collaborative Research and Development (CRD) proposal submitted to the Research Partnerships Program for NSERC, 2007.
- Reviewed a discovery Grant, 2009.
- Reviewed an NSERC CCI (College and Community Innovation Program) Proposal, 2013.

### **Journal Reviewer / Conference Referee**

- Springer Journal of Multimedia Tools and Applications special edition on Emerging Multimedia Applications, 2008.
- First International Workshop on Smart Homes for Tele-Health (SmarTel'07), 21 May 2007.
- International Journal of Wireless and Mobile Computing (2006).

- International Conference on Autonomic and Autonomous Systems, Silicon Valley, July 19-21, 2006.
- International Journal of Information and Software Technology, Elsevier Publishers. (Selected papers of the International Workshop on Web and Mobile Information Systems, Taipei, Taiwan, March 2005.
- AI'2003 – The Sixteenth Canadian Conference on Artificial Intelligence
- ACM SIGCSE 2003 – Technical Symposium on Computer Science Education
- CASCON 2001 – IBM Center for Advanced Studies Conference, Toronto.
- CASCON 2000 – IBM Center for Advanced Studies Conference, Toronto.

## **University Service:**

### **University Committees:**

- AAU Coordinating Committee on Faculty Development (Acadia Rep, 2014-2017)
- Pension Committee (member-at-large, 2014-present)
- Hiring Committee (Co-op Coordinator, 2014)
- Faculty Elections Officer at large (2014-2016)
- Library Review Committee (2013-2014) (1 application)
- Senate Representative for Computer Science (2012-2020)
- Academic Technologies Committee (2012-2018)
- University Appointments Committee (co-chair, 2010-2012)
- Senate Ad-Hoc Planning and Priorities Committee (2012)
- Financial Information Committee (AUFA Rep, 2009-2011)
- Timetable, Instruction Hours & Examination (TIE) Committee (2006-2009)
- Faculty Development Committee (Chair), Faculty of Pure and Applied Science, 2003-2006
- NSERC Summer Student Awards Committee, 2007-2008
- NSERC MSc Awards Committee, 2007-2008
- Acadia University NSERC Representative, 2007-2008

### **Faculty of Pure and Applied Science Committees:**

- Heads and Directors Committee, 2012-2020
- Research Funds Allocation Committee, 2004-2006, 2013-2014
- Scholarship and Awards Committee (Jan 2014 – Jun 2014)
- Acadia University NSERC Rep, 2007-2008

### **Departmental Committees:**

- Department Sabbatical Review Committee, 2011-2015
- Part-Time Hiring Committee, 2015-2016, (4 OA Hires, 5 PT Hires)
- Part-Time Hiring Committee, 2014-2015, (3 PT hires)
- Part-Time Hiring Committee, 2013-2014, (3 OA Hires, 6 PT hires)
- Part-Time Hiring Committee, 2012-2013, (4 OA Hires, 6 PT hires)
- Part-Time Hiring Committee, 2011-2012 (3 OA hires, 8 PT hires)
- Atlantic Provinces Council on the Sciences (APICS) Computer Science Committee Representative for Acadia University, 2004-2007
- Library Review Committee, 2013
- Departmental Review Committee, 2005, 2007, 2010x2
- Departmental Subcommittee on the Computer Science Graduate Program (2002)
- Organizer of the School Seminar Series (2002-2004)

### **Departmental Service and Outreach:**

- Finalist for the University Representative position on the Board of Directors for the Computer Science Teacher's Association (lost to incumbent).
- Invited by the Nova Scotia Department of Education to discuss the draft plan for Introducing Coding to the P-12 Curriculum in Nova Scotia.

- Volunteered for the AVRSB@21C Student Innovation Conference as an Innovation Mentor (March 2016)
- Attended a “Get your Classrooms Ready to Code” event held by Apple, Inc in Halifax (March 2016)
- Held four “Hour of Code” sessions – two at New Minas Elementary School, and two at Evangeline Middle School, for contact with around 90 students (Fall, 2015)
- Met and reviewed the Computer Programming 12 Curriculum with representatives of the Department of Education and Early Childhood Development, worked on updating the curriculum with the group. (April, 2015)
- FIRST Lego League Head Judge Advisor, 2008-2013 Acadia Robot Programming Competition.
- Created a one-day Lego Mindstorm NXT programming camp for young girls that was held in December of 2010 to coincide with Computer Science Week. The theme was “So you think you can dance – Robot Edition”, and it was attended by 14 girls.
- Head, Jodrey School of Computer Science Duck Race Committee, (2008-2011)
  - o Friendly Duck Award, 2009
  - o Techno Duck Award (Fastest technology duck), 2010 and 2011
- Created new specialization in Mobile and Ubiquitous Computing (2008-2009)
- FIRST Lego League Head Table Referee, 2007 Acadia Robot Programming Competition.
- Webmaster for the School of Computer Science Website, (2007-2008)
- Co-op coordinator for the School of Computer Science (2005-2006).
- Coach of the ACM programming teams 2004-2007.
  - o Placed 1<sup>st</sup> at APICS in 2006, brought 1<sup>st</sup> place team to Rochester for the regionals, placed 9<sup>th</sup> of 12.
  - o Placed 1<sup>st</sup> and 3<sup>rd</sup> at APICS in 2005, brought the 1<sup>st</sup> place team to Rochester for the regionals, placed 6<sup>th</sup> of 12, top Canadian team.
- Organized the School Seminar Series (2002-2004).
- Served as Acting Director of the School of Computer Science on several occasions, for periods of several days to two weeks.
- Participated in the Huggins Science Seminar, Acadia’s Fall Open House, Acadia Days and other recruiting opportunities.
- Acadia Robot Programming Competition committee (2006).

**General University Service:**

- Canadian Association of Computer Science, East Coast Representative, 2014-2016
- CAUT Defence Fund Trustee for AUFA, (2009-2012)
- AUFA Investment Committee (2009-2011)
- AUFA Executive, Treasurer, (2009-2011)
- AUFA Executive, Member at Large, 2009 (May – October).
- Advisory Board, Robot Programming Competition, (2010-present)
- Network Stream and Software Stream Committees for the AA 2.0 laptop selection process.
- AUFA Executive, Treasurer, (2007-2008)
- CAUT Defence Fund Trustee for AUFA, (2007-2008)
- AUFA Executive, Member-At-Large, (2006-2007)
- Judge for ACSBE’s Acadia Student Entrepreneurial Research Competition (2004)
- My presence was requested to meet with vendors concerning the choice of new laptops (2004).
- I have attended meetings with the Registrar concerning issues of plagiarism and wireless laptops.
- I have volunteered my time as an honours thesis reader for the Honours Thesis Committee.
- I have acted as chief proctor at the gym/arena exams several times.
- I have participated on the following thesis defence Committees:
  - o MSc
    1. Troy Saulnier, (Internal, Fall 2003)
    2. Maxine Westhead, (Chair, Spring 2005)
    3. Rick Alisch (Internal, Summer 2005)
    4. Abdur Matin (Internal, Summer 2006)
    5. Ryan Poirier (Acting Director, Fall 2007)
    6. Brian Demmings (Internal, Winter 2007)

7. Zhinan Shen (Internal, Winter 2007)
  8. Obidual Islam (Internal, Winter 2008)
  9. Hai Zhang (Internal, Winter 2008)
  10. Di Li (Internal, Winter 2008)
  11. Anwarul Azim (Internal, Summer 2009)
  12. Liangliang (Steven) Tu (Acting Director, Spring 2010)
  13. Mubashsharul Shafique (Internal, Spring 2010)
  14. Wael Yousef Alghamdi (Acting Director, Summer 2012)
  15. S.M. Mozammal Hossain (Acting Director, Summer 2012)
  16. Duane Currie (Acting Director, Summer 2013)
  17. Ti Wang (Acting Director, Fall 2013)
  18. Scott Schaffner (Acting Director, Winter 2014)
  19. Mohammad Moinul Islam (Acting Director, Winter 2014)
  20. Lubna Mohamed Eljabu (Acting Director, Spring 2014)
  21. Qi (Alvin) Jing (Director, Fall 2014)
- MEd
    22. Darlene Messervey (Chair, Summer 2004)
  - Undergrad Thesis
    23. Greg Leighton (Internal, Fall 2003)
    24. Hania El Ayoubi (Internal, Summer 2005)
    25. Andrew Young (Internal, Winter 2006)
    26. Lisa Gaudette (Internal, Fall 2006)
    27. Steve Ewaen Asemota (Internal, Winter 2007)
    28. Yibo Sun (Internal, Winter 2007)
    29. Liangliang (Steven) Tu (Acting Director, Spring 2008)
    30. Nicholas Wetmore (Director, Winter 2014)
    31. Daniel Deveau (Director, Winter 2015)
    32. Joshua d'Entremont (Director, Winter 2015)
    33. Jeremy Wheaton (Director, Winter 2015)
    34. Rachael Bood (Director, Winter 2016)
    35. Yong Hong (Peter) Chen (Director, Winter 2016)

## **Courses Taught:**

- 2016-2017
  - On admin leave / sabbatical
- 2015-2016
  - COMP 1813 X2 – Computer Concepts and Applications (256 students)
  - COMP 3753 X1 – Database Management Systems – (30 students)
  - COMP 4983 X1, X2 – Project Course (11 students)
- 2014-2015
  - COMP 1113 X1 – Programming 1 – (70 students)
  - COMP 1813 X1 – Computer Concepts and Applications (50 students)
  - COMP 1813 X2 – Computer Concepts and Applications (180 students)
  - COMP 4983 X1, X2 – Project Course (10 students)
- 2013-2014
  - COMP 1813 X1 – Computer Concepts and Applications (168 students)
  - COMP 1813 X2 – Computer Concepts and Applications (190 students)
  - COMP 3753 X1 – Database Management Systems (23 students)
  - COMP 4983 X2 – Project Course (7 students)
- 2012-2013
  - COMP 1813 X1 – Computer Concepts and Applications (197 students)
  - COMP 1813 X2 – Computer Concepts and Applications (283 students)
  - COMP 4983 X1, X2 – Project Course (7 students)
  - COMP 4923 X2 – Special Topics (1 student)
  - COMP 4996 X0 – Thesis Course (4 students)

- COMP 5913 X1 – Reading Course – Matthew Winchester
  - COMP 5913 X2 – Reading Course – Jane Gomes
- 2011-2012
  - COMP 1813 B1 – Computer Concepts and Applications (124 students)
  - COMP 1813 X2 – Computer Concepts and Applications (297 students)
  - COMP 2513 X2 – Web-Centric Programming (12 students)
  - COMP 3753 X2 – Database Management Systems (13 students)
  - COMP 4343 X2 – Networks and Distributed Systems (9 students)
  - COMP 4983 X2 – Project Course (2 students)
  - COMP 5213 X2 – Systems in Computer Science (7 students, co-taught with 4343)
  - COMP 5913 X2 – Reading Course – Joseph O’Neill
- 2010-2011
  - COMP 1813 B1 – Computer Concepts and Applications (Mac)
  - COMP 1813 X2 – Computer Concepts and Applications (Generic) (New)
  - COMP 2513 X1 – Web-Centric Programming
  - COMP 3753 X2 – Database Management Systems
  - COMP 4983 X1 – Project Course
  - COMP 5913 X1 – Reading Course – Azadeh Khorzoughi
  - COMP 5913 X1 – Reading Course – Xiaoming Pan
  - COMP 5913 X2 – Reading Course – Ping-Yu (Allen) Huang
- 2009-2010
  - COMP 1813 B2 – Computer Concepts and Applications (New)
  - COMP 2513 X2 – Web-Centric Programming
  - COMP 3753 X1 – Database Management Systems
  - COMP 4583 X1 – Mobile and Ubiquitous Computing (New)
  - COMP 4983 X0 – Project Course
- 2008-2009
  - On Sabbatical
- 2007-2008
  - COMP 2513 X1 – E-Commerce 1
  - COMP 2903 X2 – Computers in Society
  - COMP 3753 X1 – Database Management Systems
  - COMP 4923 X2 – Autonomic Computing Systems (cross-referenced with 5213)
  - COMP 4983 X0 – Project Course (6 students)
  - COMP 5213 X2 – Systems in Computer Science (Autonomic Computing Systems)
- 2006-2007
  - COMP 2513 X1 – E-Commerce 1
  - COMP 3753 X1 – Database Management Systems
  - COMP 3713 X2 – Operating Systems
  - COMP 4343 X2 – Computer Networks and Distributed Systems
  - COMP 4983 X0 – Project Course (5 students)
  - COMP 4996 X0 – Honours Thesis (1 student)
  - COMP 5913 X1 – Advanced Database Management Systems
- 2005-2006
  - COMP 1823 X2 – Computers in General Applications 2
  - COMP 2513 X1 – E-Commerce 1
  - COMP 3753 X1 – Database Management Systems
  - COMP 4343 X2 – Computer Networks and Distributed Systems
  - COMP 4983 X0 – Project Course (5 students)
  - COMP 4996 X0 – Honours Thesis (3 students)
  - COMP 5913 X2 – Graduate reading course in Internet Data Collection
- 2004-2005
  - COMP 1863 X1 – Computer Programming and General Applications
  - COMP 3713 X1 – Operating Systems
  - COMP 3753 X1 – Database Management Systems

- COMP 3753 X2 – Database Management Systems
- COMP 4343 X2 – Computer Networks and Distributed Systems
- COMP 4983 X0 – Project Course (6 students)
- COMP 5913 X1 – Graduate reading course in Advanced Database Management Systems
- 2003-2004
  - COMP 1863 X1 – Computer Programming and General Applications
  - COMP 3713 X1 – Operating Systems
  - COMP 3753 X1 – Database Management Systems
  - COMP 3753 X2 – Database Management Systems
  - COMP 4343 X2 – Computer Networks and Distributed Systems
  - COMP 4983 X0 – Project Course (5 students)
  - COMP 5213 X2 – Graduate course in Networks and Distributed Systems (cross-referenced with COMP 4343)
  - COMP 5913 X1 – Graduate reading course in Advanced Database Management Systems
- 2002-2003
  - COMP 3713 X1 – Operating Systems
  - COMP 3753 X1 – Database Management Systems
  - COMP 3753 X2 – Database Management Systems
  - COMP 4343 X2 – Computer Networks and Distributed Systems
  - COMP 4983 X0 – Project Course (4 students)