



<b>University, Company or Organization at which Leave was taken</b>	<b>Type of Leave</b>	<b>Dates</b>
University of British Columbia	Sabbatical Leave	9/12–8/13
University of British Columbia	Maternity Leave	10/07–4/08
University of British Columbia	Maternity Leave	8/15–3/16

## 8. TEACHING

### (a) *Areas of special interest and accomplishments*

I incorporate the latest research into the undergraduate courses I have taught, including our introductory computer science class (CPSC 111) and our introductory data management course (CPSC 304). Even though I make it clear that the research material is optional, it is often mentioned positively on course evaluation.

I have improved aspects of CPSC 304 each time I taught it. For example, I added a full suite of questions for the personal response system (clickers). Additionally, with Science Teaching and Learning Fellow Ben Yu, I revised the tutorial materials, which substantially improved the students' perception of the usefulness of the tutorials as measured by student attendance.

At the graduate level, I designed two new data management courses: a course on metadata management (CPSC 534A) and a new breadth-oriented data management course (CPSC 504 — an existing course on data mining was renumbered to CPSC 564). The design of CPSC 504 was done in conjunction with Laks Lakshmanan and Raymond Ng, though I took the lead and was the first to teach the course. For both graduate courses I created a novel format where I pair students for presentation and discussion.

I am currently leading the development of a CPSC 100, a new Computational Thinking course targeted at first year students.

### (b) *Courses Taught at UBC*

<b>Session</b>	<b>Course Number</b>	<b>Scheduled Hours</b>	<b>Class Size</b>	<b>Hours Taught</b>	<b>Overall Instructor Effectiveness Rating</b>
2016/2017W1	CPSC 100	3	87	3/week	4.7
2014/2015W2	CPSC 504	3	14	3/week	4.8
2014/2015W1	CPSC 101/GRSJ 201	3	110/24	3/week	4.6
2013/2014W2	CPSC 101	3	126	3/week	4.6
2013/2014W1	CPSC 304	3	114	3/week	4.8
2011/2012W2	CPSC 304	3	115	3/week	4.4
2011/2012W1	CPSC 534P	3	17	3/week	4.5
2011S1	CPSC 304	3	57	3/week	4.5
2010/2011W1	CPSC 504	3	22	3/week	4.8
2009/2010W2	CPSC 304	3	96	3/week	4.4
2009/2010W1	CPSC 504	3	21	3/week	4.5
2008/2009W2	CPSC 504	3	18	3/week	4.6
2008/2009W1	CPSC 111	3	140	3/week	4.2
2006/2007W2	CPSC 304	3	85	3/week	4.3
2006/2007W1	CPSC 504	3	21	3/week	4.8
2005/2006W2	CPSC 504	3	29	3/week	4.7
2005/2006W1	CPSC 304	3	93	3/week	4.4
2004/2005W2	CPSC 534A	3	15	3/week	4.9

(c) Undergraduate Students Supervised

Student Name	Program	Year		Role
		Start	Finish	
Haoran Yu	B.Sc. Computer Science	2016		Directed Study Supervisor
Maninder Singh Saluja	B.Sc. Civil Engineering	2015	2015	MITACS Globalinks Supervisor
Claire Edgcumbe	B.Sc. Computer Science	2014	2015	Honours Thesis Supervisor
Alexia Lou	B.Sc. Computer Science	2014	2014	Directed Study Supervisor
Claire Edgcumbe	B.Sc. Computer Science	2014	2014	USRA Supervisor
Jessica Wong	B.Sc. Computer Science	2013	2013	Directed Study Supervisor
Arianne Dee	Bachelor of Computer Science	2012	2012	Directed Study Supervisor
Arianne Dee	Bachelor of Computer Science	2012	2012	USRA Supervisor
Joyce Zhu	B.Sc. Computer Science	2011	2012	Directed Study Supervisor
Yun Lou	B.Sc. Computer Science	2011	2011	USRA Supervisor
Melissa Smith	B.Sc. Computer Science	2011	2011	Summer intern supervisor
Melissa Smith	B.Sc. Computer Science	2011	2011	Directed Study Supervisor
Yun Lou	B.Sc. Computer Science	2010	2010	USRA Supervisor
Jamila Salari	B.Sc. Computer Science	2009	2009	USRA Supervisor
Piam Kiarostami	Bachelor of Computer Science	2009	2009	Directed Study Supervisor
Chrissie Kwan	B.Sc. Computer Science	2008	2008	Directed Study Supervisor
Scott Thompson	B.Sc. Computer Science	2007	2007	Directed Study Supervisor
April Webster	B.Sc. Computer Science	2007	2007	Directed Study Supervisor
San-Yuen Chang	B.Sc. Computer Science	2006	2006	Co-op Supervisor
Clarence Kwan	B.Sc. Computer Science	2006	2006	Directed Study Supervisor
Alex Shyr	B.Sc. Computer Science	2005	2005	Directed Study Supervisor
Kevin Irmscher	B.Sc. Computer Science	2005	2005	Directed Study Supervisor

(d) MSc Students Supervised

Student Name	Program	Year		Principal	
		Start	Finish	Supervisor	CoSupervisor
Yunpiao (Whitney) Bai	M.A.Sc. Civil Engineering	2016	2017	Sheryl Staub-French	Rachel Pottinger
Jessica Wong	M.Sc.	2014	2016	Rachel Pottinger	
Nayantara Duttchoudhury	M.Sc.	2014	2015	Rachel Pottinger	
Omar AlOmeir	M.Sc.	2014	2015	Rachel Pottinger	
Arni Thrastarson	M.Sc.	2012	2014	Rachel Pottinger	
Lan Wei	M.Sc.	2012	2013	Rachel Pottinger	
Baipeng Han	M.Sc. (essay)	2012	2013	Rachel Pottinger	
Melissa Smith	M.Sc.	2012	Withdrew	Rachel Pottinger	
Wei Sun	M.Sc. (essay)	2011	2012	Rachel Pottinger	
Simona Radu	M.Sc. (essay)	2011	2012	Rachel Pottinger	
Jamila Salari	M.Sc.	2010	Withdrew	Rachel Pottinger	
Zhaohong Charles Chen	M.Sc.	2009	2012	Rachel Pottinger	
Tianyu Li	M.Sc.	2009	2011	Rachel Pottinger	Laks Lakshmanan
Dibesh Shakya	M.Sc.	2009	2011	Rachel Pottinger	
Ali Moosavi	M.Sc.	2009	2010	Rachel Pottinger	Laks Lakshmanan
April Webster	M.Sc.	2008	2010	Rachel Pottinger	
Jiemin Zhang	M.Sc.	2007	2008	Rachel Pottinger	
Michael DiBernardo	M.Sc. (essay)	2006	2007	Rachel Pottinger	
Andrew Carbonetto	M.Sc.	2006	2008	Rachel Pottinger	Francis Ouellette

(continued...)

Student Name	Program	Year		Principal	
		Start	Finish	Supervisor	CoSupervisor
Ting Wang	M.Sc.	2005	2006	Rachel Pottinger	
Shuan Wang	M.Sc.	2005	2007	Rachel Pottinger	Laks Lakshmanan
Jie Zhao	M.Sc.	2005	2006	Rachel Pottinger	
Xun Sun	M.Sc.	2005	2006	Rachel Pottinger	

Jie Zhao went to Barclays Capital in Singapore. Ting Wang became a PhD student at Georgia Tech. Xun Sun and Shuan Wang went to at Microsoft. Michael DiBernardo went to at Plate Spin/Novell. Andrew Carbonetto went to MDA. Jiemin Zhang went to Broadridge Financial Solutions. April Webster went to IBM Research, Almaden. Ali Moosavi went to SAP. Dibesh Shakya went to Ideaca Knowledge Services. Tianyu Li went to Microsoft. Zhaohong Charles Chen went to Facebook. Simona Radu went to Avanade. Wei Sun became a PhD student at the UBC Sauder School of Business. Baipeng Han went to nVidia. Lan Wei went to Amazon.ca. Jamila Salari chose to stay at home after her third child was born. Arni Thrastarson became an independent consultant at ECBG enterprises. Nayantara Duttachoudhury went to Microsoft. Omar AlOmeir became my Ph.D. student. Whitney Bai is now at Esri Canada.

(e) *PhD Students Supervised*

Student Name	Program	Year		Principal	
		Start	Finish	Supervisor	CoSupervisor
Omar AlOmeir	Ph.D.	2016		Rachel Pottinger	
Zainab Zolaktaf	Ph.D.	2012		Rachel Pottinger	
Michael Lawrence	Ph.D.	2006	2013	Rachel Pottinger	
Jian Xu	Ph.D.	2006	2011	Rachel Pottinger	

Jian Xu is now at Microsoft. Michael Lawrence is now at Google.

(f) *Postdocs Supervised*

Student Name	Program	Year		Principal	
		Start	Finish	Supervisor	CoSupervisor
Pirooz Chubak	Postdoc	2012	2013	Rachel Pottinger	
Flavio Rizzolo*	Postdoc	2010	2011	Iluju Kiringa (Ottawa)	Rachel Pottinger

\* Flavio Rizzolo was a postdoc at the University of Ottawa, but his project was joint between Ottawa and UBC.

Flavio Rizzolo is now at Statistics Canada. Pirooz Chubak is now at another postdoc at UBC.

(g) *Graduate Supervisory Committees*

Student Name	Program	Year		Role
		Start	Finish	
Hasan Cavka	Ph.D. Civil Engineering	2012		Thesis Committee Member
Wei Sun	P.h.D. Business	2014	2015	Thesis Committee Member
Mandeep Takhar	M.Sc. Computer Science	2014	2014	Thesis Committee Member
Valerie Ishida	M.Sc. Computer Science	2014	2014	Thesis Committee Member
Behzad Pilehchianlangroodi	M.Sc. Civil Engineering	2012	2012	Thesis Committee Member

(continued...)

Student Name	Program	Year		Role
		Start	Finish	
Mandana Sotoodeh	Ph.D. Electrical and Comp. Eng.	2007	Incomplete	Thesis Committee Member
Madhav Nepal	Ph.D. Civil Engineering	2006	2011	Thesis Committee Member
Brett Cannon	Ph.D. Computer Science	2009	2011	Thesis Committee Member
Wendy Hui Wang	Ph.D. Computer Science	2006	2006	Thesis Committee Member
Terence Ho	M.Sc. Computer Science	2007	2008	Thesis Committee Member
Alfred Pang	M.Sc. Computer Science	2007	2007	Second Reader for Breadth Essay
Bertrand Low	M.Sc. Computer Science	2006	2007	Thesis Committee Member
Fei Ma	M.Sc. Computer Science	2006	2006	Thesis Committee Member
Elaine Chang	M.Sc. Computer Science	2005	2005	Thesis Committee Member

## 9. SCHOLARLY AND PROFESSIONAL ACTIVITIES

### (a) Areas of special interest and accomplishments

When heterogeneous databases are combined, they typically have different schemas (i.e., data representations). For information to be shared between these databases, there must be some way for differences in representation (i.e., semantic heterogeneity) to be resolved. If information about a neighborhood is stored one way in schema A, and another way in schema B, then for information from both schemas to be combined, there must be some way to describe how data in schema A relates to the data in schema B. Combining these heterogeneous sources so that they can be queried uniformly is known as semantic integration, and forms the basis of my research program. I focus on both generic semantic integration and on semantic integration in application-based settings. Collaborating with researchers in other domains helps me to ensure that my research is applicable to real-world problems.

### (b) Research or equivalent grants (indicate under COMP whether grants were obtained competitively (C) or non-competitively (NC))

Agency	Title	Comp	\$/Year	Year(s)	PI(s)	Co-PIs
NSERC Discovery	Improving Recommending and Understanding Schemas and Their Provenance	C	2017– 2023	42,000	Rachel Pottinger	
NSERC Accelerator		C	40,000	2017– 2020	Rachel Pottinger	
NSERC Discovery	Improving Schema Understanding in Integration	C	24,000	2011– 2017	Rachel Pottinger	
NSERC Strategic Project Grant	IDEAS2.0: Integrative Data- Enabled Approaches to Sustainability across Scales	C	150,920 Total 30,184 Individual share	2011– 2014	Sheryl Staub- French	Kellogg Booth, Ronald Kellett, Rachel Pottinger, Maged Senbel

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Agency	Title	Comp	\$/Year	Year(s)	PI(s)	Co-PIs
SAP and NSERC CRD	Requirements-Driven Data Warehousing	C	68,656 Total 17,264 Individual share	2009–2011	Iluju Kiringa	Mariano Consens, Rachel Pottinger
NSERC BIN Strategic Network	Design of a Conceptual Integration Model: Language and Algorithms	C	70,754 Total 37,655 Individual share	2009–2014	Iluju Kiringa, Rachel Pottinger	
NSERC BIN Strategic Network	Data Warehouse Generation	C	25,000 Total 15,000 Individual share	2011	Iluju Kiringa, Rachel Pottinger	
NSERC BIN Strategic Network	Ontology Discovery from Documents and Social Media	C	15,186 Total 7,593 Individual share	2009–2012	Laks. V.S. Lakshmanan, Rachel Pottinger	
NSERC BIN Strategic Network	Schema Mapping Management and Coordination	C	57,830 Total 42,330 Individual share	2011–2013	Denilson Barbosa, Rachel Pottinger	
NSERC Discovery	Data Management Techniques for Unmanaged Data	C	20,500	2008–2010	Rachel Pottinger	
NSERC Strategic Project Grant	ARTIFACT: Advanced Research, Techniques and Informatics for Future Advantages in Construction	C	147,500 Total 36,875 Individual share	2006–2009	Sheryl Staub-French	Kellogg Booth, Rachel Pottinger, Melanie Tory
NSERC-PSERPC	Decision Coordination for a National Network of Infrastructures	C	340,000 Total 17,000 Individual share	2005–2008	José Martí	and 12 others
NSERC Discovery	Extending, Verifying, and Applying Meta-data Management	C	22,000	2005–2008	Rachel Pottinger	
University of British Columbia	Startup	NC	60,000	2004	Rachel Pottinger	

(c) *Research or equivalent contracts (indicate under COMP whether grants were obtained competitively (C) or non-competitively (NC))*

(d) *Invited Presentations*

- **Real Data:**

NSERC Workshop on Empirical Evaluation of Big Data Integration and Cleaning at the University of Toronto, September 2014.

- **Interdisciplinary Database Research:**

University of Toronto, February 2013.

- **Semantic Integration:**

Banff Visual Analytics Interdisciplinary Workshop on Canadian and Global Challenges in Financial Risk Analysis: Defining Visual Solutions, May 2012.

- **Improving Collaboration Through Schema Understandability and Long Term Exception Handling:** Business Intelligence Workshop — NSERC BIN/IBM Research Business Intelligence at IBM Watson, February 2012.

- **Improving Data Warehouse Construction and Schema Understandability:** BI Workshop — NSERC BIN/SAP Research Business Intelligence Practice at Sophia-Antipolis, France, September 2011.

- **Data Coordination & Conceptual Integration Management:**

BIN workshop at the Banff International Research Station, May, 2011.

- **Semantic Integration of Real World Data:**

University of Toronto, July, 2011.

University of Maryland, April, 2011.

Cornell University, February, 2011.

University of Michigan, February, 2011.

- **Schema Merging and Mapping Creation for Relational Sources:**

University of Alberta Database Systems Seminar, May, 2009.

- **Current Trends in Metadata Management Research: Taxonomies and Ontologies:**

Joint meeting of Society for Technical Communicators, Canada West Coast Chapter and Content Management Professionals, Canada West Community, May, 2006.

- **Processing Queries and Merging Schemas in Support of Data Integration:**

Duke University, May, 2004.

University of British Columbia, April, 2004.

University of Virginia, April, 2004.

Tufts University, March, 2004.

University of Waterloo, March 2004.

Indiana University, February, 2004.

- **Merging Schemas and Processing Queries in Support of Data Integration:**

Microsoft Research, 2004.

- **The Merge Operator for Model Management:**

University of Maryland, 2001.

- **A Scalable Algorithm for Answering Queries Using Views:**

Dagstuhl Seminar #99271: Foundations for Information Integration, 1999.

(e) *Other Presentations*

- **SeMap: A Generic Mapping Construction System:**

EDBT, Nantes, France, 2008.

- **Schema Merging and Mapping Creation for Relational Sources:**  
EDBT, Nantes, France, 2008.
- **Merging Models Based on Given Correspondences:**  
VLDB, Berlin, Germany, 2003.
- **A Scalable Algorithm for Answering Queries Using Views:**  
VLDB, Cairo, Egypt, 2000.

(f) *Conference Participation (Organizer, Keynote Speaker, etc.)*

- **Area Chair** International Conference on Data Engineering (ICDE), 2018.
- **Co-Chair:** PhD Workshop at VLDB, 2015.
- **Co-Chair:** DB Me (Database Mentoring workshop) at SIGMOD, June 11, 2012.
- **Co-Chair:** New Investigator, Grace Hopper Celebration of Women in Computing, 2012.
- **Co-Chair:** DESWeb (Data Engineering meets the Semantic Web) at ICDE, 2012.
- **Co-Chair:** Next Generation Business Intelligence (BI) Tools at IBM CASCON, November 4, 2010.
- **Co-Chair:** DB Me (Database Mentoring workshop) at SIGMOD, June 11, 2010.
- **Registration Co-chair:** ACM SIGMOD, June 9–12, 2008.
- **Co-chair:** Technical Posters, Grace Hopper Celebration of Women in Computing, 2006.

## 10. SERVICE TO THE UNIVERSITY

(a) *Memberships on committees, including offices held and dates*

### Departmental Committees:

- Carl Wieman Science Education Initiative Director, 1/2017–
- Committee for Outreach, Diversity, and Equality (CODE), 9/2016–
- Merit Committee, 2016.
- Program Experience Committee, 9/2014–8/2015.
- Graduate Recruiting Committee, 9/2013–8/2015.
- Graduate Affairs Committee, 9/2013–8/2015.
- Head Search Committee, 3/2015–4/2015.
- Reid Holmes’s tenure mini committee, 6/2015.
- Merit Committee, 2014.
- Ron Garcia’s reappointment mini-committee, 5/2014.
- Strategic Planning Steering Committee, 2/2012–4/2013.
- Communications, 9/2011–8/2012.
- Finance, 9/2010–8/2011.
- Focus on Women in Computer Science, 9/2008–8/2010.
- Faculty Affairs Committee, 5/2005–9/2007.
- Ad-hoc Committee on Breadth Requirements for PhD students, 5/2005–6/2006.

### ICICS Committees:

- ICICS Distinguished Lecture Committee, 1/2007–1/2008.

### University of British Columbia Committees:



- Faculty of Science’s Skylight Faculty Advisory Council, 1/2017–.
- Graduate & Postdoctoral Studies University Doctoral Fellowship (UDF) Committee, 2017.
- Graduate & Postdoctoral Studies Canada Graduate Scholarship Master’s (CGSM) and Affiliated Committee, 2015.
- Graduate & Postdoctoral Studies Advisory Group on Graduate Supervision, 2014.
- Faculty of Graduate and Postdoctoral Studies Canada Graduate Scholarship masters National Sciences and Engineering subcommittee

**University of Washington Department of Computer Science:**

- Chair Search Committee, 2000–2001.
- Prospective Graduate Student Committee, 1999.

(b) *Other service, including dates*

**University of British Columbia:**

- Speaker: “A Short History of Programming Languages and Applications: A Chicken and Egg Approach.” UBC Geering Up Computational Thinking Professional Development Day, 2017.
- Imagine UBC Orientations Professor, 2008, 2011, 2013, 2014.
- Imagine UBC presentation, 2008.
- Mentor, UBC Department of Computer Science Tri-Mentoring Program, 2004–2007, 2008–2015.

**University of Washington Department of Computer Science:**

- Presentation: “Finding an Academic Job: The University of Washington’s course”: *Exploring Faculty Careers in Higher Education*, 2006.
- Mentor, University of Washington’s Making Connections high school mentoring program for girls and under-represented minorities, 2000–2004.
- Designer and organizer, undergraduate women’s mentoring program, 2003.
- Tutor for women and underrepresented minorities, 2002–2003.
- Graduate Student Coordinator, 2000–2001.

**Duke University Department of Computer Science:**

- President, Duke University Student ACM Chapter, 1996–1997.

**11. SERVICE TO THE COMMUNITY**

(a) *Memberships in scholarly societies, including offices held and dates*

- Association of Computing Machinery (ACM) Member, 1995–present.
- ACM SIGMOD Member, 1998–present.

(b) *Editorships*

- **Associate Editor** Proceedings of Very Large Databases (PVLDB), 2017.

(c) *Program Committees*

- Very Large Databases (VLDB) PhD Workshop, 2005, 2007, 2017.
- International Workshop on the Web and Databases (WebDB), 2017.
- Very Large Databases (VLDB), 2007, 2008, 2009, 2010, 2011, 2012, 2016.
- ACM SIGMOD International Conference on Management of Data (SIGMOD) Demonstrations Track, 2012, 2014, 2016.
- Very Large Databases (VLDB) Industrial Track, 2015.
- International Conference on Data Engineering (ICDE), 2006, 2007, 2009, 2010, 2011, 2012, 2013, 2014, 2015.
- ACM SIGMOD International Conference on Management of Data (SIGMOD), 2011, 2015.
- Workshop on Data Integration and Applications (DINA), 2014.
- Very Large Databases (VLDB) Demonstrations Track, 2013.
- ACM Conference on Information and Knowledge Management (CIKM), 2013.
- Extending Database Technology (EDBT), 2012, 2013.
- International Database Engineering & Applications Symposium (IDEAS), 2012.
- International Workshop on Semantic Search over the Web (SSW) 2012
- Alberto Mendelzon Workshop on Foundations of Databases (AMW) 2010, 2012.
- International Conference on Conceptual Modeling (ER), 2009, 2011, 2012.
- Workshop on Enabling Real Time Business Intelligence (BIRTE), 2009.
- Workshop on Databases, Information Systems and Peer-to-Peer Computing (DBISP2P), 2005, 2006, 2007.
- The International Conference on Management of Data (COMAD), 2006.
- The International Workshop on Web Information and Data Management (WIDM), 2006.
- International Conference on Data Engineering (ICDE) PhD Workshop, 2006.
- The International Workshop on Database Interoperability (InterDB), 2006.

(d) *Reviewer (journal, agency, etc., including dates)*

**Funding agencies**

- US NSF Information and Intelligence Systems Panel, external reviewer, 2014, 2015.
- NSERC, external reviewer, 2006, 2007, 2010, 2011, 2012, 2013, 2015.
- US NSF Information and Intelligent Systems Panel, member, 2011, 2014.
- Austrian Science Fund, external reviewer, 2011, 2012.

**Books**

- Morgan & Claypool series on Data Management

**Journals**

- Automation in Construction, 2017.
- ACM Transactions on Database Systems, 2005, 2011, 2012, 2015, 2016.
- IEEE Transactions on Knowledge and Data Engineering, 2002–2014, 2016.
- VLDB Journal, 2002–2009, 2012, 2014.
- Information Systems Journal, 2003–2010, 2013.
- World Wide Web Journal, 2012.
- ACM Computing Surveys, 2007–2011.

- Communications of the ACM, 2004, 2011.
- VLDB (Journal Track), 2006–2009.
- Theoretical Computer Science, 2008.
- ACM Transactions on the Web, 2007.
- Data and Knowledge Engineering (DKE), 2006.
- IBM Systems Journal, 2005.
- AI Communications, 2002.
- Knowledge and Information Systems, 2001.

(e) *External examiner (indicate university and dates)*

- University Ph.D. Examiner for Melanie Courtot, University of British Columbia, Medical Genetics, 2014.
- University Ph.D. Examiner for Shafiq Joty, University of British Columbia, Computer Science, 2013.
- External Ph.D. Examiner for Patricia Rodriguez-Gianolli, University of Toronto, Computer Science, 2013.
- University Ph.D. Examiner for Hongrae Lee, University of British Columbia, Computer Science, 2010.
- University Ph.D. Examiner for Sase Singh, University of British Columbia, Business Admin., 2009.
- MS. Thesis Examiner for Kathleen Bill, University of Newcastle, Commerce, 2005.

(f) *National and international service for women in science and engineering*

- Selected Presentations:
  - How I feel in love with computer science and got a great career in 7 not so easy lessons: Quantum Leaps Burnaby, April 2, 2017.
  - Coordinator: Passion and Purpose Panel, Regional Grace Hopper Celebration, 2014.
  - Graduate School Survival Skills: Computing Research Association’s Committee on the Status of Women in Computing’s Grad Cohort for Women Workshop at the Grace Hopper Celebration of Women in Computing, October 8, 2014.
  - Graduate School Survival Skills: Computing Research Association’s Committee on the Status of Women in Computing’s Grad Cohort for Women Workshop at the Grace Hopper Celebration of Women in Computing, October 3, 2012.
  - Graduate School Survival Skills: Computing Research Association’s Committee on the Status of Women in Computing’s Grad Cohort for Women Workshop at the Grace Hopper Celebration of Women in Computing, November 9, 2011.
  - Ten Ways to Succeed/Fail in Graduate School: Computing Research Association’s Committee on the Status of Women in Computing’s Grad Cohort for Women Workshop, February 24, 2005.
  - Pursuing Graduate School & the Computer Science Research Career: Grace Hopper Celebration of Women in Computing Panel, 2002.
- Co-chair of the Selection Committee for the Denice Denton Emerging Leader ABIE award, 2017.
- Member of the Selection Committee for the Denice Denton Emerging Leader ABIE award, 2016.
- MentorNet Mentor, 2015–present.
- Member of the organizing committee for the Denice Denton Emerging Leaders Workshop, 2016.

- Member of the Grace Hopper Celebration of Women in Computing Faculty Track Committee, 2015.
- Member of the Mentor/Protege council of MentorNet, 2013–2014.
- Co-creator and co-moderator of lists for pretenure and job hunting PhD women in Computer Science: Computing Research Association’s Committee on the Status of Women in Computing Research, 2008–present.
- Panel Organizer and Moderator: Selected Outreach Activities in British Columbia, Grace Hopper Celebration of Women in Computing, October 2, 2009.
- Academic Advisory Committee Member: Grace Hopper Celebration of Women in Computing, October 17–20, 2007.
- Co-organizer: Anonymous Advice Session for Junior Faculty at the Grace Hopper Celebration of Women in Computing, Oct 6, 2006.

(g) *Other service to the community*

- Member of the NSERC Business Intelligence Network’s Scientific Advisory Council, 2012–2014.
- Associate Information Director ACM SIGMOD, 2005–2014.
- Speaker at New Researchers’ Symposium at SIGMOD 2010, June, 2010.

## 12. AWARDS AND DISTINCTIONS

(a) *Awards for Teaching (indicate name of award, awarding organizations and date)*

- Incredible Instructor Award, CPSC 304, Department of Computer Science, UBC, 2010, 2014.
- Nominated for UBC Killam Teaching Prize for Graduate Instruction, 2008 and 2011.
- Nominated for UBC Killam Award for Excellence in Mentoring, 2009.

(b) *Awards for Scholarship (indicate name of award, awarding organizations and date)*

- Graduate Research Fellowship, Microsoft Research, 2001–2004.
- Fellowship, Achievement Rewards for College Scientists Foundation, 1997–2000.
- Graduate Research Fellowship, United States National Science Foundation, 1997–2000.
- Graduate Research Program for Women Grant, Lucent Technologies, Bell Laboratories, 1997–2000.

(c) *Awards for Service (indicate name of award, awarding organizations and date)*

- Denice Denton Emerging Leader Award, Anita Borg Institute, 2007.

## 13. OTHER RELEVANT INFORMATION (Maximum One Page)

(a) *Collaborators*

Other than students whom I supervise, some of my publications are co-authored with:

- *Cody Brown*, *Yongik Chung*, and *Shriram Rajagopalan* were students in my graduate class.
- *Madhav Nepal* and *Mandana Sotoodeh* were PhD students whose committees I am on.
- *Elaine Chang* and *Terence Ho* were MSc students for whom I was the second reader (i.e., I was on their committee).
- *Hassina Bounif* was a visiting PhD student from EPFL (Switzerland).
- *Sheryl Staub-French* is an Associate Professor in Civil Engineering

(b) *Publication Venue Information*

In databases, significant emphasis is placed on both journal and rigorously reviewed conference publications.

**Journals:** VLDB Journal and the ACM Transactions on Database Systems are widely acknowledged to be the top two journals in data management. Information Systems (IS), the International Journal on Cooperative Information Systems (IJCIS), and Data and Knowledge Engineering (DKE) are also leading database journals.

EuroVis is a leading information visualization conference which publishes its proceedings as a special issue of Computer Graphics Forum.

The Journal of Biomedical Informatics publishes techniques and methods that are generally applicable to biomedical informatics.

**Rigorously Reviewed Conferences:** The ACM SIGMOD Conference on Management of Data (SIGMOD), the International Conference on Very Large Databases (VLDB), and Extending Database Technology (EDBT) are top conferences for database research, with SIGMOD and VLDB widely considered to be the most prestigious. In recognition of the quality of the conference papers, VLDB has published its papers as a journal, PVLDB, since 2008. For consistency, I have listed all three of my VLDB papers as conference papers.

The ACM Conference on Information and Knowledge Management (CIKM) is a second-tier database, information retrieval, and knowledge management conference with 23 years of history.

The International Conference on Advanced Information Systems Engineering (CAiSE) is a second-tier conference on information systems engineering with 23 years of history.

THE UNIVERSITY OF BRITISH COLUMBIA  
*Publication Record*

**SURNAME:** Pottinger  
**Date:** June 21, 2017      Initials:  
**FIRST NAME:** Rachel  
**MIDDLE NAME:** Amanda

## 1. REFEREED PUBLICATIONS

In category 1b, I list those conference publications that were subjected to rigorous review (typically 3 or more lengthy reviews). I separated conference publications in which the review process was less rigorous (less than 3 reviews or short reviews) into category 1.c.i, “Workshop and Conference Proceedings (Other)”. Acceptance rates for conferences are provided when available.

Authors are generally in the order of the primary student, other students, then faculty. Exceptions are where order reflects contributions. In all cases, one is only included as an author if intellectual contributions have been made to the work. I have placed the name of students and postdocs for whom I have been the supervisor or co-supervisor in bold and italicized the names of the students I have supervised in other fashions (e.g., those who completed the work on the paper while taking my class).

I list citation counts for publications with at least 10 citations. All citation counts are from Google Scholar as of July 2011.

### (a) *Journals*

- J13. *Hasan Burak Cavka*, Sheryl Staub-French, and Rachel Pottinger. Evaluating the Alignment of Organizational and Project Contexts for BIM Adoption: A Case Study of a Large Owner Organization. *Buildings*. 5.4(2015): 1265–1300.
- J12. **Michael Lawrence**, Rachel Pottinger, Sheryl Staub-French, and *Madhav Nepal*. Creating Flexible Mappings Between Building Information Models and Cost Information. *Automation in Construction*. 45(2014): 107–118.
- J11. **Jian Xu** and Rachel Pottinger. Integrating Domain Heterogeneous Data Sources using Decomposition Aggregation Queries. *Information Systems*. 39.1(2014):80–107.
- J10. *Madhav Nepal*, Sheryl Staub-French, Rachel Pottinger and **Jiemin Zhang**. Ontology-Based Feature Modeling for Construction Information Extraction from a Building Information Model. *The Journal of Computing in Civil Engineering*. 27.5(2013): 555–569.
- J9. Melanie Tory, Sheryl Staub-French, Dandan Huang, Yu-Ling Chang, Colin Swindells, and Rachel Pottinger. Comparative Visualization of Construction Schedules. *Automation in Construction*, 29(2013): 68–82.
- J8. *Madhav Nepal*, Sheryl Staub-French, Rachel Pottinger, and **April Webster**. Querying a Building Information Model for Construction-Specific Spatial Information. *Advanced Engineering Informatics*. 26.4(2012):904–923.

- J7. **Jie Zhao**, Rachel Pottinger, *Cody Brown*, and *Shriram Rajagopalan*. Schema Mediation in Peer Data Management Systems. *International Journal on Cooperative Information Systems*, 20.3(2011):261–305.
- J6. **Jian Xu** and Rachel Pottinger. Optimizing acquaintance selection in a PDMS. *International Journal on Cooperative Information Systems*, 20.1(2011): 39–81.
- J5. **Jiemin Zhang, April Webster, Michael Lawrence, Madhav Nepal**, Rachel Pottinger, Sheryl Staub-French, and Melanie Tory. Improving the Usability of Standard Schemas. *Information Systems*. 36(2011): 209–221.
- J4. Angela Bonifati, *Elaine Chang, Terence Ho*, Laks V.S. Lakshmanan, Rachel Pottinger, *Yongik Chung*. Schema Mapping and Query Translation in Heterogeneous P2P XML Databases. *VLDB Journal*, 19.2 (2010): 231–256. (10 citations)
- J3. Dandan Huang, Melanie Tory, Sheryl Staub-French and Rachel Pottinger. Visualization Techniques for Schedule Comparison. *Computer Graphics Forum (Proceedings of EuroVis 2009)*, 28.3(2009): 951–958.
- J2. **Michael DiBernardo**, Rachel Pottinger and Mark Wilkinson. Semi-Automatic Web Service Composition for the Life Sciences Using the BioMoby Semantic Web Framework. *Journal of Biomedical Informatics*, 41.5(2008): 837–847. (24 citations)
- J1. Rachel Pottinger and Alon Halevy. MiniCon: A Scalable Algorithm for Answering Queries Using Views. *VLDB Journal*. 10.2–3(2001): 182–198. (409 citations — note: also includes citations for conference paper C1.)
- (b) *Conference Proceedings (Stringently Reviewed)*
- C10. **Zainab Zolaktaf, Jian Xu**, and Rachel Pottinger. Extracting Aggregate Answer Statistics for Integration. International Conference on Extending Database Technology (EDBT). 2015. 85–96. (Conference acceptance rate = 25%).
- C9. **Tianyu Li, Pirooz Chubak**, Laks V.S. Lakshmanan, and Rachel Pottinger. Efficient Extraction of Ontologies from Domain Specific Text Corpora. Short Paper in *International Conference on Information and Knowledge Management (CIKM)*. 2012. 1537–1541. (Conference acceptance rate for short papers = 27.7%.)
- C8. **Michael Lawrence**, Rachel Pottinger and Sheryl Staub-French. Data Coordination: Supporting Contingent Updates. *International Conference on Very Large Databases (VLDB)*. 2011. 831–842. (Conference acceptance rate = 18%.)
- C7. **Ali Moosavi, Tianyu Li**, Laks V.S. Lakshmanan, and Rachel Pottinger: ONTECTAS: Bridging the Gap Between Collaborative Tagging Systems and Structured Data. *International Conference on Advanced Information System Engineering (CAiSE)*. 2011. 436–451. (Conference acceptance rate = 13%.)
- C6. **Xun Sun**, Rachel Pottinger, and **Michael Lawrence**. Support Elements in Graph Structured Schema Reintegration. Short Paper in *International Conference on Information and Knowledge Management (CIKM)*. 2010. 1361–1364. (Conference acceptance rate for short papers = 31.3%.)
- C5. Rachel Pottinger and Philip Bernstein. Schema merging and mapping creation for relational sources. *Extending Database Technology (EDBT)*. 2008. 73–84. (Conference acceptance rate = 16% — 29 citations)

- C4. **Ting Wang** and Rachel Pottinger. SeMap: A Generic Schema Matching System. *Extending Database Technology (EDBT)*. 2008. 97–108. (Conference acceptance rate = 16%.)
- C3. Peter Mork, Rachel Pottinger and Philip Bernstein. Challenges in Precisely Aligning Models of Human Anatomy Using Generic Schema Matching. *MedInfo*. 2004. 401–405. (38% acceptance rate — 19 citations)
- C2. Rachel Pottinger and Philip Bernstein. Merging Models Based on Given Correspondences. *International Conference on Very Large Databases (VLDB)*. 2003. 862–873. (18% acceptance rate — 223 citations)
- C1. Rachel Pottinger and Alon Levy. A Scalable Algorithm for Answering Queries Using Views. *International Conference on Very Large Databases (VLDB)*. 2000. 484–495. (15% acceptance rate — citations counted under journal paper J1.)
- (c) *Other*
- i. Workshop and Conference Proceedings (Other)
- W11. *Hasan Burak Cavka*, Sheryl Staub-French, and Rachel Pottinger. Evaluation of organizational context and requirements for leveraging building information models to support handover and operations & maintenance. *CSCE, 5th International/11th Construction Specialty Conference*. 2015.
- W10. *Puyan A. Zadeh*, Sheryl Staub-French, and Rachel Pottinger. Review of BIM Quality Assessment Approaches for Facility Management. *International Construction Specialty Conference*. 2015. 11 pages.
- W9. Ting Li, Victoria Lemieux, Rachel Pottinger. Challenges in Resolving Semantic Heterogeneity with The Global Legal Entity Identifier System. *Data Science for Macro-Modeling with Financial and Economic Datasets Workshop*. June, 2014.
- W8. *Hasan Burak Cavka*, Sheryl Staub-French, and Rachel Pottinger. Case study of BIM handover to support building operations. *CSCE, 4th Construction Specialty Conference*. 2013.
- W7. *Madhav Nepal*, Sheryl Staub-French, and Rachel Pottinger. Providing Query Support to Leverage BIM for Construction. *Construction Research Congress*. 2012. 767–777.
- W6. *Mandana Sotoodeh*, Philippe Kruchten, Rachel Pottinger. Towards Supporting Users in Semantic Exploration of Large Distributed Schemas. *The 8th International Conference on Mobile Web Information Systems*. 2011. 570–577.
- W5. **Michael Lawrence**, Rachel Pottinger, and Sheryl Staub-French. Coordination of Data in Heterogeneous Domains. *Second International Workshop on New Trends in Information Integration (NTII) at ICDE*. 2010. 167–170.
- W4. *Madhav Nepal*, **Jiemin Zhang**, **April Webster**, Sheryl Staub-French, Rachel Pottinger and **Michael Lawrence**. Querying IFC-based Building information Models to Support Construction Management Functions. *Construction Research Congress*. 2009. (Conference acceptance rate = 53%)
- W3. *Madhav Nepal*, Sheryl Staub-French, **Jiemin Zhang**, Rachel Pottinger and **Michael Lawrence**. Deriving Construction Features from an IFC Model. *Canadian Society for Civil Engineering Conference (CSCE)*. 2008. 11 pages.



- W2. *Hassina Bounif*, Stefano Spaccapietra and Rachel Pottinger. Requirements Ontology and Multi-representation Strategy for Database Schema Evolution. *VLDB Workshop on Ontologies-based techniques for DataBases and Information Systems (ODBIS)*. 2006. 68–84. (50% acceptance rate.)
- W1. *Hassina Bounif* and Rachel Pottinger. Schema Repository for Database Schema Evolution. *2nd International Workshop on Data Management in Global Data Repositories (GRep)*. Krakow, Poland. Sep, 2006. 647–651. (10 citations)

ii. Demonstration Descriptions

- D2. Angela Bonifati, *Elaine Chang*, *Terence Ho*, Laks Lakshmanan and Rachel Pottinger. HEP-TOX: Marrying XML and Heterogeneity in Your P2P Databases. Demonstration description in *International Conference on Very Large Databases (VLDB)*. 2005. 74–76. (56 citations)
- D1. Zachary Ives, Alon Levy, Jayant Madhavan, Rachel Pottinger, Stefan Saroiu, Igor Tatarinov, Qiong Chen, Ewa Jaslikowska and Wai Tak Theodora Yeung. Self-Organizing Data Sharing Communities with SAGRES. Demonstration description in *ACM SIGMOD Conference on Management of Data (SIGMOD)*. 2000. 582. (11 citations)

iii. Posters

- P4. **Tianyu Li**, Laks V.S. Lakshmanan, and Rachel Pottinger. Ontology Discovery in Collaborative Tagging Systems and Text Data. *The Grace Hopper Celebration of Women in Computing*. Nov, 2011.
- P3. **Michael Lawrence** and Rachel Pottinger. A System for Integration of Lossy and Unstructured Data in Large Building Projects. *The 20th Canadian Artificial Intelligence Conference*. May, 2007.
- P2. **Andrew Carbonetto**, Francis Ouellette and Rachel Pottinger. Ontology Alignment on Biological Systems using Domain Taxonomy. *Canadian Genetic Diseases Network (CGDN) Annual Scientific Meeting*. Apr, 2007.
- P1. Rachel Pottinger. An Extensible System for Merging Two Models. *International Conference on Very Large Databases (VLDB)*. 2002.

iv. Magazine Articles

- M1. Rachel Pottinger. Choosing a Ph.D. Program in Computer Science. *ACM Crossroads Magazine*. 6.1 (Fall 1999): pp. 6 - 13.

## 2. NON-REFEREED PUBLICATIONS

(a) *Invited Papers*

- I3. Kenneth A. Ross, Rada Chirkova, Dimitrios Gunopulos, Rachel Pottinger, Jun Yang, and Jingren Zhou. Reminiscences on influential papers. *SIGMOD Record*. 34.1 (2005): 74–76.
- I2. Rachel Pottinger and Philip Bernstein. Creating a Mediated Schema Based on Initial Correspondences. *IEEE Data Engineering Bulletin*. 25.3 (September 2002): 26–31. (18 citations)
- I1. Philip Bernstein, Alon Halevy and Rachel Pottinger. A Vision for Management of Complex Models. *SIGMOD RECORD*. 29.4 (December 2000): 55–63. (299 citations)

(b) *Other Non-Refereed Publications*

- T1. Marti, Srivastava, Ventura, Jatskevitch, Pottinger, Beznosov, Poole, Klinkenberg, Woo, Kruchten, Booth, Rosenberg, Bartram, Hollman, Thibert, **Xu**, Cervantes, Armstrong, Li, Han, Juarez, Ozog, Rahman, Jiang, *Sotoodeh*, Monu, Clarkson, and Ilich. The I2SIM simulator for disaster response coordination in interdependent infrastructure systems. Technical Report to British Columbia Transmission Corporation, Telus Corporation, Greater Vancouver Regional District, and Vancouver International Airport Authority, 2006.

**3. BOOKS**

(a) *Chapters*

- B4. Rachel Pottinger: Information Integration in Business Intelligence. *Perspectives on Business Intelligence*. Ed. M. Tamer Ozsü. Synthesis Lectures on Data Management, April 2013. pp. 53–66.
- B3. Rachel Pottinger: Mapping-Based Merging of Schemas. *Schema Matching and Mapping*. Ed. Angela Bonifati, Zohra Bellashene and Erhard Rahm. Data-Centric Systems and Applications (Springer), 2011. pp. 223–252. ISBN 978-3-642-16517-7.
- B2. Rachel Pottinger and Philip Bernstein. Associativity and Commutativity in Generic Merge. *Conceptual Modeling: Foundations and Applications*. Springer, 2009: 254–272.
- B1. Rachel Pottinger. Database Schema Integration. *Encyclopedia of Geographical Information Systems*. Ed. Shashi Shekhar and Hui Xiong. Springer, 2007.