

Curriculum Vitae for Faculty Members

Date: February 5, 2025 **Initials:**

1. **SURNAME:** Pottinger
FIRST NAME: Rachel
MIDDLE NAME: Amanda
2. **DEPARTMENT/SCHOOL:** Computer Science
3. **FACULTY:** Science
4. **PRESENT RANK:** Professor **SINCE:** 2021/07
5. **POST-SECONDARY EDUCATION**

(a) *Degrees*

| University or Institution | Degree | Subject Area | Dates |
|---------------------------|--------|------------------|-----------------|
| University of Washington | PhD | Computer Science | 2000/04–2004/08 |
| University of Washington | MSc | Computer Science | 1997/09–2000/03 |
| Duke University | B.Sc. | Computer Science | 1993/09–1997/05 |

Title of Dissertation: Processing Queries and Merging Schemas in Support of Data Integration.

Name of Supervisors: Philip Bernstein and Alon Halevy

6. EMPLOYMENT RECORD

(a) *Prior to coming to UBC*

| University, Company or Organization | Rank or Title | Dates |
|--|------------------------|-----------------|
| Microsoft Research | Research Intern | 2003/06–2003/08 |
| Microsoft Research | Research Intern | 2002/06–2002/08 |
| Microsoft Research | Research Intern | 2001/06–2001/08 |
| Hewlett-Packard Laboratories | Research Intern | 1998/06–1998/08 |
| Lucent Technologies, Bell Laboratories | Research Intern | 1997/06–1997/08 |
| Microsoft Corporation | Program Manager Intern | 1996/06–1996/08 |

(b) At UBC

| Rank or Title | Dates |
|---------------------|--------------------|
| Professor | 2021/07 to present |
| Associate Professor | 2012/07 to 2021/06 |
| Assistant Professor | 2004/09 to 2012/06 |

7. LEAVES OF ABSENCE

| University, Company or Organization at which Leave was taken | Type of Leave | Dates |
|---|------------------|-----------------|
| University of British Columbia | Sabbatical Leave | 2020/09–2021/08 |
| University of British Columbia | Maternity Leave | 2015/08–2016/03 |
| University of British Columbia | Sabbatical Leave | 2012/09–2013/08 |
| University of British Columbia | Maternity Leave | 2007/10–2008/04 |

8. TEACHING

(a) *Areas of special interest and accomplishments*

I led the development of a new computational thinking course (CPSC 100) for non-majors. The first offering of this course was in 2016. The course focuses on three aspects of computational thinking: (1) building blocks (e.g., time analysis of algorithms), (2) applications (e.g., data mining) and (3) impact (e.g., privacy and security implications of data mining).

At the graduate level, I designed two new data management courses: a course on metadata management (CPSC 534A/P) 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 have taught the course most times it has been offered. For both graduate courses I created a novel format where I pair students for presentation and discussion.

(b) *Courses Taught at UBC*

| Session | Course Number | Scheduled Hours | Class Size | Hours Taught | Overall Instructor Effectiveness Rating (out of 5.0) |
|-------------|-------------------|--------------------|---------------|-----------------|--|
| 2024/2025W1 | CPSC 304 | 3 | 210 | 3/week | 4.7 |
| 2024/2025W1 | CPSC 304 | 3 | 159 | 3/week | 4.8 |
| 2023/2024W2 | CPSC 504 | 3 | 17 | 3/week | 4.9 |
| 2023/2024W1 | CPSC 304 | 3 | 174 | 3/week | 4.7 |
| 2022/2023W2 | CPSC 504 | 3 | 14 | 3/week | 4.9 |
| 2022/2023W1 | CPSC 304 | 3 | 185 | 3/week | 4.8 |
| 2021/2022W1 | CPSC 304 | 3 | 170 | 3/week | 4.8 |
| 2021/2022W1 | CPSC 304 | 3 | 159 | 3/week | 4.6 |
| 2019/2020W1 | CPSC 100 | 3 | 167 | 3/week | 4.3 |
| 2018/2019W2 | CPSC 504 | 3 | 10 | 3/week | 5.0 |
| 2017/2018W2 | CPSC 304 | 3 | 160 | 3/week | 4.6 |
| 2017/2018W1 | CPSC 100 | 3 | 166 | 3/week | 4.6 |
| 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 |

(continued...)

| Session | Course Number | Scheduled Hours | Class Size | Hours Taught | Overall Instructor Effectiveness Rating (out of 5.0) |
|-------------|---------------|-----------------|------------|--------------|---|
| 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 | |
| Steven Boqiao Zhang | B.Sc. Computer Science | 2024 | Directed Study Supervisor | |
| Nathan Senyard | B.Sc. Computer Science | 2024 | | Directed Study Supervisor |
| Yuann Yao | B.Sc. Computer Science | 2024 | | Directed Study Supervisor |
| Jing Yixiao | B.Sc. Computer Science | 2024 | | Directed Study Supervisor |
| Zoe Yuan | B.Sc. Computer Science | 2023 | 2023 | Directed Study Supervisor |
| Ruilong Liu | B.Sc. Computer Science | 2023 | 2023 | Directed Study Supervisor |
| Jacqueline Chan | B.Sc. Computer Science | 2023 | 2023 | Directed Study Supervisor |
| Sandy Yue Zhang | B.Sc. Computer Science | 2023 | 2023 | Directed Study Supervisor |
| Shiyu Chen | B.Sc. Computer Science | 2023 | 2023 | Directed Study Supervisor |
| Olivia Lam | B.Sc. Computer Science | 2022 | 2022 | Directed Study Supervisor |
| Ziyong Xiong | B.Sc. Computer Science | 2022 | 2022 | Directed Study Supervisor |
| Eugenie Yujing Lai | B.Sc. Computer Science | 2019 | 2021 | Directed Study Supervisor |
| Mary Chung | B.Sc. Computer Science | 2020 | 2020 | Co-op co-supervisor |
| Spring Asrai | B.Sc. Computer Science | 2020 | 2020 | Directed Study Supervisor |
| Ashley Barkworth | B.Sc. Computer Science | 2019 | 2020 | Honours Thesis Supervisor |
| Ethan Zhu | B.Sc. Mathematical Sciences | 2018 | 2019 | Volunteer Supervisor |
| Eugenie Yujing Lai | B.Sc. Computer Science | 2019 | 2019 | Summer intern Supervisor |
| Jianjun Winston Liu | B.Sc. Computer Science | 2018 | 2019 | Honours Thesis Supervisor |
| Alicia Tang | B.Sc. Computer Science | 2017 | 2018 | Directed Study Supervisor |
| Janik Andreas | B.Sc. Computer Science | 2017 | 2018 | Honours Thesis Supervisor |
| Haoran Yu | B.Sc. Computer Science | 2016 | 2017 | 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 |

(continued...)

| Student Name | Program | Year | | Role |
|-----------------|------------------------------|-------|--------|---------------------------|
| | | Start | Finish | |
| 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 | Co-Supervisor |
| Jason Hall | M.Sc. (essay) | 2022 | | Rachel Pottinger | |
| Jingxuan (Carol) Huang | M.Sc. | 2022 | | Rachel Pottinger | |
| Ehsan Soltan Aghai | M.Sc. | 2022 | | Rachel Pottinger | |
| Haoran Yu | M.Sc. | 2018 | 2023 | Rachel Pottinger | |
| Ke (Mark) Ma | M.Sc. (essay) | 2020 | 2021 | Rachel Pottinger | |
| Flora Liu | M.Sc. (essay) | 2018 | 2019 | Rachel Pottinger | |
| Yunpiao (Whitney) Bai | M.A.Sc. Civil Engineering | 2016 | 2017 | Sheryl Staub-French | Rachel Pottinger |
| Jessica Wong | M.Sc. | 2014 | 2016 | Rachel Pottinger | |
| Nayantara Duttachoudhury | M.Sc. | 2014 | 2015 | Rachel Pottinger | |
| Omar AlOmeir | M.Sc. | 2014 | 2015 | Rachel Pottinger | |
| Árni Már 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 |
| 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 | |

(e) *PhD Students Supervised*

| Student Name | Program | Year | | Principal | Co-Supervisor |
|------------------|---------|-------|--------|------------------|---------------|
| | | Start | Finish | Supervisor | |
| Jianhao Cao | Ph.D. | 2021 | | Rachel Pottinger | |
| Omar AlOmeir | Ph.D. | 2016 | 2023 | Rachel Pottinger | |
| Zainab Zolaktaf | Ph.D. | 2012 | 2019 | Rachel Pottinger | |
| Michael Lawrence | Ph.D. | 2006 | 2013 | Rachel Pottinger | |
| Jian Xu | Ph.D. | 2006 | 2011 | Rachel Pottinger | |

Jian Xu went to Microsoft. Michael Lawrence went to Google. Zainab Zolaktaf went to EhsAI. Omar is a faculty member at Prince Sultan University in Saudi Arabia.

(f) *Postdocs Supervised*

| Student Name | Program | Year | | Principal | Co-Supervisor |
|-----------------|---------|-------|--------|------------------------|------------------|
| | | Start | Finish | Supervisor | |
| Mostafa Milani | Postdoc | 2019 | 2021 | Rachel Pottinger | |
| Puyan Zadeh | Postdoc | 2017 | 2018 | Sheryl Staub-French | Rachel Pottinger |
| Pirooz Chubak | Postdoc | 2012 | 2013 | Rachel Pottinger | |
| Flavio Rizzolo* | Postdoc | 2010 | 2011 | Iluju Kiringa (Ottawa) | Rachel Pottinger |

* Flavio Rizzolo was at the University of Ottawa, but his project was joint between Ottawa and UBC. Flavio Rizzolo went to Statistics Canada. Pirooz Chubak went to Samsung Research. Puyan Zadeh became an adjunct professor in the Civil Engineering department at UBC. Mostafa Milani became an assistant professor at Western University.

(g) *Graduate Supervisory Committees*

| Student Name | Program | Year | | Role |
|----------------------------|-------------------------------|-------|------------|---------------------------------|
| | | Start | Finish | |
| Dalia Alghamdi | Ph.D. Bioinformatics | 2017 | | Thesis Committee Member |
| Gustavo Tsay | Ph.D. Civil Engineering | 2018 | 2024 | Thesis Committee Member |
| Devarsh Bhonde | Ph.D. Civil Engineering | 2019 | 2023 | Thesis Committee Member |
| Jatin Maheshwary | M.A.Sc. Civil Engineering | 2018 | 2018 | Second Reader |
| Kimberly Dextras-Romagnino | M.Sc. Computer Science | 2018 | 2018 | Thesis Committee Member |
| Hasan Cavka | Ph.D. Civil Engineering | 2012 | 2017 | Thesis Committee Member |
| Wei Sun | Ph.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 |
| Mandana Sotoodeh | Ph.D. Electrical & 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

Using data is hard. Users do not understand how to access the data they have. This problem is worse when users want to combine data from multiple sources that may be stored in different ways. My research agenda draws inspiration from and aims to resolve this problem, with a focus on making data accessible to users in application-based settings. Collaborating with researchers in other domains helps me to ensure that my research is applicable to real-world problems. I have published papers on data from many disciplines. This includes publications listed at the end of this CV in bioinformatics [J2, C3], financial data [W9], astronomy [C12], disaster management [J11, J6, C10], and especially Civil Engineering [J15, J14, J13, J12, J10, J8, J5, C8, C7, W12, W11, W10, W8, W7, W5, W4, W3].

(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 |
|-------------------------------|---|------|--|-----------|---------------------|---|
| UBC Science Skylight | Converting CPSC 304 to PrairieLearn | C | 1,282 | 2024 | Rachel Pottinger | Gittu George, Seva Lynov and Jessica Wong |
| UBC GCRC | Smart Infrastructure and Construction Research Cluster | C | 150,000 | 2024–2025 | Tsung-Yuan Yang | and 14 others |
| NSERC Discovery | Improving querying and data access for non-expert users | C | 41,000 | 2023–2028 | Rachel Pottinger | |
| UBC Designing For People | Building grant capacity for facilities management building research | C | 5,200 | 2022 | Rachel Pottinger | Sheryl Staub-French, Dongwook Yoon |
| NSERC Discovery | Improving Recommending and Understanding Schemas and Their Provenance | C | 42,000 | 2017–2023 | 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 |
| SAP and NSERC CRD | Requirements-Driven Data Warehousing | C | 68,656 Total 17,264 Individual share | 2009–2011 | Iluju Kiringa | Mariano Consens, Rachel Pottinger |

(continued...)

| Agency | Title | Comp | \$/Year | Year(s) | PI(s) | Co-PIs |
|--------------------------------|---|------|--|-----------|---|---|
| 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*

- **Panelist: Trends in CS Education:**

- Duke Computer Science 50th Anniversary Celebration, September 2023.

- **Improving Querying of Relational Data by Non-Database Experts:**

- University of California at San Diego Database Seminar (online), April 2022.

- **Panelist: What is the future of database education?:**
 - Very Large Data Bases Conference (VLDB), August 2021.
- **Improving Understanding and Exploration of Data by Non-Database Experts:**
 - Dalhousie University, November 2018.
 - University of Waterloo, April 2018.
 - Duke University, April 2018.
 - North Carolina State University, April 2018.
- **Understanding and Exploring: Schemas, Recommendations, and Provenance:**
 - Northwest Database Society Annual Meeting, January 2018.
- **Real Data:**
 - NSERC Workshop on Empirical Evaluation of Big Data Integration and Cleaning, 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:**
 - NSERC BIN/IBM Research Business Intelligence Workshop, IBM Watson, February 2012.
- **Improving Data Warehouse Construction and Schema Understandability:**
 - NSERC BIN/SAP Research Business Intelligence Practice Workshop, Sophia-Antipolis, France, September 2011.
- **Data Coordination & Conceptual Integration Management:**
 - BIN workshop, 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.)*

- **Diversity & Inclusion Co-Chair:** Extending Database Technology (EDBT), 2025.
- **Member Best Paper Award Committee:** Very Large Data Bases (VLDB), 2024.
- **Member Best Paper Award Committee:** Extending Database Technology (EDBT), 2024.
- **Co-Chair:** Computing Research Association’s (CRA) Conference at Snowbird, July 2024.
- **Organizer:** Computing Research Association’s (CRA) Leadership Academy, May 2023.
- **Co-Chair:** Computing Research Association’s (CRA) New Chairs Workshop, July 2020.
- **General Co-Chair:** International Conference on the Management of Data (SIGMOD), June 2020.
- **Area Chair** International Conference on Data Engineering (ICDE), April 2018.
- **Co-Chair:** PhD Workshop, VLDB, 2015.
- **Co-Chair:** DB Me (Database Mentoring workshop), SIGMOD, June 2012.
- **Co-Chair:** New Investigator, Grace Hopper Celebration of Women in Computing, October 2012.
- **Co-Chair:** DESWeb (Data Engineering meets the Semantic Web, ICDE, April 2012.
- **Co-Chair:** Next Generation Business Intelligence (BI) Tools, IBM CASCON, November 2010.
- **Co-Chair:** DB Me (Database Mentoring workshop), SIGMOD, June 2010.
- **Registration Co-chair:** ACM SIGMOD, June 2008.
- **Co-chair:** Technical Posters, Grace Hopper Celebration of Women in Computing, October 2006.

10. SERVICE TO THE UNIVERSITY

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

Departmental Leadership:

- Associate Head for the Undergraduate Program, 2018/07–2020/08.
- Carl Wieman Science Education Initiative Director, 2017/01–2018/06.

Departmental Committee Chairs:

- Peer Evaluation (Co-chair—Evaluation coordination & scheduling), 2024/07–present.
- Graduate Recruiting and Admissions Committee, 2021/09–2024/06.
- Committee for Outreach, Diversity, and Equity (CODE), 2019/02–2019/07.

Departmental Committee Memberships:

- Faculty and Research Affairs (Faculty mentor assignment), 2024/07–present.
- Peer Evaluation, 2023/04.

- Program Experience Committee (ex-officio member), 2018/07–2020/08.
- Educational Leadership Recruiting Committee (ex-officio member), 2018/07–2020/06.
- Student Development (ex-officio member), 2018/07–2019/07.
- Committee for Outreach, Diversity, and Equity (CODE) (ex-officio member), 2018/07–2019/01.
- Research Faculty Recruiting Committee, 2017/10–2018/06.
- Program Experience Committee, 2014/09–2015/08, 2017/09–2018/06.
- Strategic Planning Committee, 2017/12–2018/03.
- Committee for Outreach, Diversity, and Equality (CODE), 2016/09–2017/08.
- Merit Committee, 2016/05.
- Graduate Recruiting Committee, 2013/09–2015/08.
- Graduate Affairs Committee, 2013/09–2015/08.
- Head Search Committee, 2015/03–2015/04.
- Reid Holmes’s tenure mini committee, 2015/06.
- Merit Committee, 2014/05.
- Ron Garcia’s reappointment mini-committee, 2014/05.
- Strategic Planning Steering Committee, 2012/02–2013/04.
- Communications, 2011/09–2012/08.
- Finance, 2010/09–2011/08.
- Focus on Women in Computer Science, 2008/09–2010/08.
- Faculty Affairs Committee, 2005/05–2007/09.
- Ad-hoc Committee on Breadth Requirements for PhD students, 2005/05–2006/06.

University of British Columbia Committees:

- President’s Advisory Committee (PAC) for Selection of Dean of Science, 2024/08–2025/01.
- Department of Electrical and Computer Engineering Internal CRC Tier 2 Selection Committee, 2023/07–2023/09.
- Faculty Association’s Nomination Committee, 2022/02.
- Bachelor of Media Studies (BMS) Steering Committee, 2018/09–2020/08.
- Faculty of Science’s Skylight Faculty Advisory Council, 2017/01–2020/08.
- Adjudication of Vice-President, Research & Innovation’s Grants for Catalyzing Research Clusters (GCRC) proposals, 2019/12.
- Faculty of Science Working Group on Data Science, 2018/05–2019/09.
- Adjudication of Vice-President, Research & Innovation’s Program for Undergraduate Research Experience Funding Proposals, 2019/03.
- 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, 2013.
- Institute of Computing, Information, and Congitive Systems (ICICS) Distinguished Lecture Committee, 2007/01–2008/01.

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 on advisory boards*

- ACM Special Interest Group on Management of data (SIGMOD) Awards Committee member, 2025–present.
- ACM Special Interest Group on Management of Data (SIGMOD) Secretary/Treasurer (2021–2025).
- Computing Research Association (CRA) Board of Directors (Three elected 3 year terms), 2018–present.

(b) *Editorships*

- **Associate Editor** Very Large Databases Journal (VLDB Journal), 2019–2025.
- **Associate Editor** Proceedings of Very Large Databases (PVLDB), 2017, 2023, 2024, 2026.
- **Associate Editor** International Conference on the Management of Data (SIGMOD), 2022.

(c) *Program Committees*

- ACM SIGMOD International Conference on Management of Data (SIGMOD), 2011, 2015, 2026.
- Conference on Innovative Data Research (CIDR), 2025.
- Extending Database Technology (EDBT), Senior PC Member, 2024.
- International Workshop on Data Systems Education (DataEd): Bridging education practice with education research, 2022, 2023, 2024.
- Very Large Databases (VLDB) Demonstrations Track, 2013, 2018.
- International Conference on Data Engineering (ICDE) Lightning talks, 2018.

- 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.
- Workshop on Data Integration and Applications (DINA), 2014.
- 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

- NSERC, external reviewer, 2006, 2007, 2010, 2011, 2012, 2013, 2015, 2017, 2018, 2019, 2020, 2021, 2023, 2024.
- MITACS Accelerate, external reviewer, 2010, 2017, 2024.
- Marsden Fund Council, Royal Society of New Zealand, external reviewer, 2023.
- Canada Foundation for Innovation (CFI), external reviewer, 2023.
- US NSF Information and Intelligence Systems Panel, external reviewer, 2014, 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

- Journal of Data and Information Quality, 2022.
- VLDB Journal, 2002-2009, 2012, 2014, 2018.
- Automation in Construction, 2017.
- ACM Transactions on Database Systems, 2005, 2011, 2012, 2015, 2016.
- IEEE Transactions on Knowledge and Data Engineering, 2002-2014, 2016.
- 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.

Other

- Computing Research Association and Computing Community Consortium Computing Innovation Fellows 2020 Reviewer.

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

- University Ph.D. Examiner for Mehrzad Shahinmoghadam, École de technologie supérieure, Département de génie de la construction, 2024.
- University Ph.D. Examiner for Demet Kirmizibayrak, University of British Columbia, Physics and Astronomy, 2024.
- University Ph.D. Examiner for Paul Bucci, University of British Columbia, Computer Science, 2024.
- University Ph.D. Examiner for Izabell Janzen, University of British Columbia, Computer Science, 2022.
- University Ph.D. Examiner for Patrick Huber, University of British Columbia, Computer Science, 2022.
- External Ph.D. Examiner for Bahar Ghadiri Bashardoost, University of Toronto, Computer Science, 2022.
- University Ph.D. Examiner for Stevan Gavrilovic, University of British Columbia, Civil Engineering, 2020.
- 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:
 - Planning Your Research Career: CRA Career Mentoring Workshop, February 27, 2020.
 - How I fell 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, 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, 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, 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-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, 2005–2021.
- MentorNet Mentor, 2015–2019.
- Co-chair of the Selection Committee for the Denice Denton Emerging Leader ABIE award, 2017, 2018.
- Member of the Selection Committee for the Denice Denton Emerging Leader ABIE award, 2016.
- 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.
- 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, 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, New Researchers’ Symposium, SIGMOD 2010, June, 2010.

12. AWARDS AND DISTINCTIONS

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

- Excellence in Teaching Award, Department of Computer Science’s 50th Anniversary, UBC, 2018.
- Incredible Instructor Award, CPSC 100, Department of Computer Science, UBC, 2017.
- 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)*

- Denice Denton Emerging Leader Award (awarded for high quality research and significant impact on diversity), Anita Borg Institute, 2007.
- 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)*

- Superstar Area Editor — VLDB 2024
- Distinguished Senior PC Member Award — EDBT 2024
- Distinguished Area Editor Award — VLDB 2023
- Distinguished Area Editor Award — SIGMOD 2023

THE UNIVERSITY OF BRITISH COLUMBIA
Publication Record

SURNAME: Pottinger

Date: February 5, 2025 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). In databases, significant emphasis is placed on both journal and rigorously reviewed conference publications. These rigorous conference venues are at least as prestigious and impactful as the journal venues.

I separate conference publications in which the review process is 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 main student, other students, then faculty; authors are ordered alphabetically within groups. Exceptions are where order reflects contributions. There is one exception to this; in my papers with civil engineer Dr. Sheryl Staub-French, the order of authorship between the two of us was determined by our relative 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).

(a) *Journals*

- J17. *Gustavo S. Tsay*, Sheryl Staub-French, Erik Poirier, **Puyan Zadeh**, and Rachel Pottinger. BIM for FM: understanding information quality issues in terms of compliance with owner’s Building Information Modeling Requirements. *Frontiers in Built Environment*: 9(2023): (30 pages).
- J16. **Omar AlOmeir**, **Eugenie Y. Lai**, **Mostafa Milani**, and Rachel Pottinger. Summarizing Provenance of Aggregate Query Results in Relational Databases. *Transactions on Data and Knowledge Engineering* 35.10(2023): 10695–10709.
- J15. **Puyan A. Zadeh**, **Lan Wei**, **Arianne Dee**, Rachel Pottinger, and Sheryl Staub-French. BIM CityGML Data Integration for Modern Urban Challenges. *Journal of Information Technology in Construction (ITcon)*. 24(2019): 318–340.
- J14. **Puyan A. Zadeh**, Guan Wang, *Hasan Burak-Cavka*, Sheryl Staub-French, and Rachel Pottinger. Information Quality Assessment for Facility Management. *Journal of Advanced Engineering Informatics (ADVEI)*. (2017): 181–205.
- 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, and *Yongik Chung*. Schema Mapping and Query Translation in Heterogeneous P2P XML Databases. *VLDB Journal*. 19.2 (2010): 231–256.
- 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.
- J1. Rachel Pottinger and Alon Halevy. MiniCon: A Scalable Algorithm for Answering Queries Using Views. *VLDB Journal*. 10.2–3(2001): 182–198.
- (b) *Conference Proceedings (Rigorously Reviewed)*
- C17. *Ananya Rahaman*, *Anny Zheng*, Mostafa Milani, Fei Chiang, and Rachel Pottinger. Evaluating SQL Understanding in Large Language Models. International Conference on Extending Database Technology (EDBT). 2025. *To Appear*.
- C16. **Eugenie Yujing Lai**, **Zainab Zolaktaf**, **Mostafa Milani**, **Omar Al Omeir**, **Jianhao Cao**, and Rachel Pottinger. Workload-Aware Query Recommendation Using Deep Learning. International Conference on Extending Database Technology (EDBT). 2023. 53–65.

- C15. **Omar AlOmeir, Eugenie Yujing Lai, Mostafa Milani,** and Rachel Pottinger. Summarizing Provenance of Aggregate Results in Relational Databases. Short paper in *the International Conference on Data Engineering (ICDE)*. 2021. 1955–1958.
- C14. **Zainab Zolaktaf, Mostafa Milani,** and Rachel Pottinger. Facilitating SQL Query Composition and Analysis. *ACM SIGMOD International Conference on Management of Data (SIGMOD)*. 2020. 209–224 (Conference acceptance rate = 26.9%).
- C13. **Omar AlOmeir, Eugenie Yujing Lai, Mostafa Milani,** and Rachel Pottinger. The Past-watch: On the usability of provenance data in relational databases. Short paper in *the International Conference on Data Engineering (ICDE)*. 2020. 1882–1885 (Short paper acceptance rate = 33%).
- C12. **Jianjun Winston Liu, Zainab Zolaktaf,** Rachel Pottinger, and **Mostafa Milani.** Improvement of SQL Recommendation on a Scientific Database. Short paper in *International Conference on Scientific and Statistical Database Management (SSDBM)* 2019. 206–209 (Short paper acceptance rate = 62%).
- C11. **Zainab Zolaktaf,** Reza Babanezhad, and Rachel Pottinger. A Generic Top-N Recommendation Framework for Trading-off Accuracy, Novelty, and Coverage. *International Conference on Data Engineering (ICDE)*. 2018. 149–160. (Conference acceptance rate = 23%).
- 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%)
- 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. (Conference acceptance rate = 38%).

- C2. Rachel Pottinger and Philip Bernstein. Merging Models Based on Given Correspondences. *International Conference on Very Large Databases (VLDB)*. 2003. 862–873. (Conference acceptance rate = 18%.)
- C1. Rachel Pottinger and Alon Levy. A Scalable Algorithm for Answering Queries Using Views. *International Conference on Very Large Databases (VLDB)*. 2000. 484–495. (Conference acceptance rate = 15%.)
- (c) *Other*
- i. Workshop and Conference Proceedings (Other)
- W14. **Jianhao Cao**, Tamara Munzner, and Rachel Pottinger. Visualizing a Tabular Data Repository to Facilitate Descriptive Tag Augmentation for New Tables. *HILDA 2023: Workshop on Human-In-the-Loop Data Analytics*. 2023. 3 pages.
- W13. **Zainab Zolaktaf**, **Omar AlOmeir**, and Rachel Pottinger. Bridging the Gap Between User-centric and Offline Evaluation of Personalized Recommendation Systems. *MuMe 2018: 1st International Workshop on Multi-Method Evaluation of Personalized Systems*. 2018. 183–186.
- W12. **Yunpaio Bai**, **Puyan Zadeh**, Sheryl Staub-French, and Rachel Pottinger. Integrating GIS and BIM for Community-Scale Energy Modeling. *International Conference on Sustainable Infrastructure*. 2017. 185–196.
- 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, and 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, and 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.

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.

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.

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*

- I5 Zack Ives, Johannes Gehrke, Jana Giceva, Arun Kumar, Rachel Pottinger: VLDB Panel Summary: “The Future of Data(base) Education: Is the Cow Book Dead?” *SIGMOD Record*. 50(3). (2020): 23–26.
- I4. David Maier, Rachel Pottinger, AnHai Doan, Eduard Dragut, Bill Howe, Joanne Lateulere, John Lateulere, Mostafa Milani, Tilmann Rabl, Dan Suciu, Yufei Tao, Wang-Chiew Tan, and Kristin Tufte. Advice from SIGMOD/PODS 2020. *SIGMOD Record*. 49.3. (2020): 43–54.
- 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.
- I1. Philip Bernstein, Alon Halevy, and Rachel Pottinger. A Vision for Management of Complex Models. *SIGMOD RECORD*. 29.4 (December 2000): 55–63.

(b) *Other Non-Refereed Publications*

- T2. **Flavio Rizzolo**, Iluju Kiringa, Rachel Pottinger, and Kwok Wong. The Conceptual Integration Modeling Framework: Abstracting from the multidimensional model. arXiv:1009.0255. 2010. 18 pages.
- 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 Özsu. 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.