

Mehrdad Sabetzadeh – Curriculum Vitae (as of June 10, 2008)

Department of Computer Science
University of Toronto
10 King's College Rd.
Toronto, ON M5S 3G4
Canada

+1 (416) 946-5237
mehrdad@cs.toronto.edu
<http://www.cs.toronto.edu/~mehrdad>

Research Interests

Model-based software engineering, particularly automated techniques for construction, integration, and analysis of models built during the requirements and design phases.

Requirements engineering, conceptual modelling, model management, reasoning in the presence of incompleteness and inconsistency, feature interaction analysis, traceability, category theory, and mathematical logic.

Education

University of Toronto , Toronto, Canada Ph.D., Computer Science Thesis: <i>Merging and Consistency Checking of Distributed Models</i> Supervisor: Prof. S. Easterbrook	2003 – August 2008 (Expected)
University of Toronto , Toronto, Canada M.S., Computer Science Thesis: <i>A Category-Theoretic Approach to Representation and Analysis of Inconsistency in Graph-Based Viewpoints</i> Supervisor: Prof. S. Easterbrook	2002 – 2003
Sharif University of Technology , Tehran, Iran B.S., Software Engineering	1996 – 2000

Honours and Awards

NSERC Postdoctoral Fellowship	2009–2010
C.C. Gotlieb (Kelly) Graduate Fellowship	2007
Ontario Graduate Scholarship (OGS)	2007 – 2008
ACM SIGSOFT Distinguished Paper (ICSE'07)	2007
SIGSOFT CAPS Travel Grant (ICSE'07, ICSE'08)	2007, 2008
Ontario Graduate Scholarship (OGS)	2006 – 2007
Doctoral Symposium Travel Grant (ASE'06)	2006
Best Paper Nominee (RE'05)	2005
University of Toronto Fellowship	2002 – 2006
Ranked third in the National Graduate-Level Computer Science Exam, Iran (15,000 participants)	2000

Professional Activities and Service

- ACM SIGSOFT Member.
- Posters co-chair, RE 2009.
- Publications chair, ASE 2007 International Workshop on Living with Uncertainties (IWLU'07).

- Student volunteer, ASE 2006.
- Organizer, University of Toronto Workshop on Model Management, August 2006.
- Reviewer for Fundamenta Informaticae, ASE 2006, CIDR 2007, FSE 2007, ASE 2007.

Publications

Refereed Journal Papers

1. **M. Sabetzadeh**, S. Easterbrook. “View Merging in the Presence of Incompleteness and Inconsistency”. *Requirements Engineering Journal*, Vol. 11, No. 3, pages. 174–193, June 2006.

Refereed Conference Papers

(Note: ASE, FSE, ICSE, and RE are all top-tier conferences.)

1. S. Nejati, **M. Sabetzadeh**, M. Chechik, S. Uchitel, P. Zave. “Towards Compositional Synthesis of Evolving Systems”. In *Proceedings of 16th ACM SIGSOFT Symposium on Foundations of Software Engineering (FSE’08)*, Atlanta, GA, USA, November 2008. Acceptance rate: 20% (31/152). (*To appear*)
2. **M. Sabetzadeh**, S. Nejati, S. Liaskos, S. Easterbrook, M. Chechik. “Consistency Checking of Conceptual Models via Model Merging”. In *Proceedings of 15th IEEE International Requirements Engineering Conference (RE’07)*, pages 221–230, New Delhi, India, October 2007. Acceptance rate: 13% (22/172). (*Presenter*)
3. S. Nejati, **M. Sabetzadeh**, M. Chechik, S. Easterbrook, P. Zave. “Matching and Merging of Statecharts Specifications”. In *Proceedings of 29th International Conference on Software Engineering (ICSE’07)*, pages 54–64, Minneapolis, MN, USA, May 2007. Acceptance rate: 15% (49/334). (**ACM SIGSOFT Distinguished Paper**).
4. **M. Sabetzadeh**, S. Easterbrook. “An Algebraic Framework for Merging Incomplete and Inconsistent Views”. In *Proceedings of 13th International Requirements Engineering Conference (RE’05)*, pages 306–318, Paris, France, September 2005. Acceptance rate: 20% (35/175). (**Best Paper Nominee**). (*Presenter*)
5. N. Niu, S. Easterbrook, **M. Sabetzadeh**. “A Category-Theoretic Approach to Syntactic Software Merging”. In *Proceedings of 21st International Conference on Software Maintenance (ICSM’05)*, pages 197–206, Budapest, Hungary, September 2005. Acceptance rate: 30% (55/180).
6. **M. Sabetzadeh**, S. Easterbrook. “Analysis of Inconsistency in Graph-Based Viewpoints: A Category-Theoretic Approach”. In *Proceedings of 18th International Conference on Automated Software Engineering (ASE’03)*, pages 12–21, Montréal, QC, Canada, October 2003. Acceptance rate: 13% (22/170). (*Presenter*)

Refereed Tool Papers

1. **M. Sabetzadeh**, S. Nejati, S. Easterbrook, M. Chechik. “Global Consistency Checking of Distributed Models with TReMer+”. In *Proceedings of 30th International Conference on Software Engineering (ICSE’08)*, pages 815–818, Leipzig, Germany, May 2008. Formal Research Demonstration. Acceptance rate: 20% (18/88). 4 pages. (*Presenter*)
2. **M. Sabetzadeh**, S. Easterbrook. “iVuBlender: A Tool for Merging Incomplete and Inconsistent Views”. In *Proceedings of 13th International Requirements Engineering Conference (RE’05)*, pages 453–454, Paris, France, September 2005. 2 pages. (*Presenter*)

Refereed Workshop Papers

1. R. Salay, M. Chechik, S. Easterbrook, Z. Diskin, S. Nejati, **M. Sabetzadeh**, P. McCormick, P. Viriyakattiyaporn. “An Eclipse-Based Model Management Framework”. In *Proceedings of OOPSLA Workshop on Eclipse Technology eXchange (ETX’07)*, Montréal, QC, Canada, November 2007. 6 pages.
2. **M. Sabetzadeh**, S. Nejati, S. Easterbrook, M. Chechik. “A Relationship-Driven Framework for Model Merging”. In *Proceedings of ICSE Workshop on Modeling in Software Engineering (MiSE’07)*, Minneapolis, MN, USA, May 2007. 6 pages. Acceptance rate: 46% (12/26). (*Presenter*)
3. G. Brunet, M. Chechik, S. Easterbrook, S. Nejati, N. Niu, **M. Sabetzadeh**. “A Manifesto for Model Merging”. In *Proceedings of ICSE Workshop on Global Integrated Model Management (GaMMA’06)*, Shanghai, China, May 2006. 7 pages.

4. **M. Sabetzadeh**, S. Easterbrook. “Traceability in Viewpoint Merging: A Model Management Perspective”. In *Proceedings of ASE Workshop on Traceability in Emerging Forms of Software Engineering (TEFSE’05)*, Long Beach, CA, USA, November 2005. 6 pages. (Presenter)

Doctoral Symposia (Refereed)

1. **M. Sabetzadeh**. “Management of Incomplete and Inconsistent Views”. Doctoral Track of *21st International Conference on Automated Software Engineering (ASE’06)*, Tokyo, Japan, September 2006. 4 pages. Acceptance rate: 24% (6/25).

Posters (Refereed)

1. M. Chechik, S. Easterbrook, R. Salay, Z. Diskin, **M. Sabetzadeh**, S. Nejati, P. McCormick, P. Viriyakattiyaporn “An Eclipse-Based Tool Framework for Software Model Management”. *Tools and Posters Track of 2007 Conference of the Centre for Advanced Studies on Collaborative Research (CASCON’07)*, Toronto, ON, Canada, October 2007.
2. **M. Sabetzadeh**, S. Nejati, S. Easterbrook, M. Chechik. “A Relationship-Driven Approach to View Merging”. *Posters Track of 14th ACM SIGSOFT Symposium on Foundations of Software Engineering (FSE’06)*, Portland, OR, USA, November 2006.
3. **M. Sabetzadeh**, S. Nejati, S. Easterbrook, M. Chechik. “TRemer: A Tool for Relationship-Driven Model Merging”. *Tools and Posters Track of Formal Methods 2006 (FM’06)*, Hamilton, ON, Canada, August 2006. Also presented at *CASCON’06 and CSER*, Toronto, ON, Canada, October 2006.

Theses and Technical Reports (Non-Refereed)

1. **M. Sabetzadeh**. “Merging and Consistency Checking of Distributed Models”, Ph.D. Thesis, in preparation.
2. S. Nejati, **M. Sabetzadeh**, M. Chechik, S. Easterbrook. “Identifying and Representing Requirements Variability in Families of Reactive Software”. Technical Report CSRG-538, Department of Computer Science, University of Toronto, Canada, February 2006.
3. **M. Sabetzadeh**. “A Survey of Approaches to View Merging”. Depth Oral Exam Report, Department of Computer Science, University of Toronto, Canada, November 2006.
4. **M. Sabetzadeh**, S. Easterbrook. “An Algebraic Framework for Merging Incomplete and Inconsistent Views”. Technical Report CSRG-496, Department of Computer Science, University of Toronto, Canada, September 2004.
5. **M. Sabetzadeh**. “A Category-Theoretic Approach to Representation and Analysis of Inconsistency in Graph-Based Viewpoints”. Master’s Thesis, Department of Computer Science, University of Toronto, Canada, August 2003.

In Preparation

1. **M. Sabetzadeh**, S. Nejati, S. Easterbrook, M. Chechik. “Consistency Checking of Conceptual Models via Model Merging”. (Journal version)
2. S. Nejati, **M. Sabetzadeh**, M. Chechik, S. Easterbrook, P. Zave. “Matching and Merging of Statecharts Specifications”. (Journal version)

Working History

Graduate Research Assistant

University of Toronto

Projects: *Model Management* (2004–present), *Modelling Incompleteness and Inconsistency in Requirements Viewpoints* (2002-2004)

January 2002–present

Toronto, Canada

Seasonal Instructor

University of Toronto

Course: *Programming on the Web CSC309*

Responsibilities included: *preparing and conducting lectures; designing assignments and exams; supervising teaching assistants; and grading exams.*

Summers 2003, 2004

Toronto, Canada

Teaching Assistant
University of Toronto

January 2002–December 2007
Toronto, Canada

Courses: *Software Architecture and Design CSC407 (eight times)*, *Requirements Engineering CSC340 (two times)*, *Programming on the Web CSC309 (five times)*, *Computer Organization CSC258 (one time)*, *Programming Languages CSC324 (two times)*, *Advanced Software Engineering ECE444 (one time)*

Responsibilities included: *conducting tutorials; administering lab classes; grading assignments and exams; preparing supplementary material for lectures and tutorials; holding office hours; and other work as assigned.*

Software Developer
Sharif University of Technology

January 1999–October 2001
Tehran, Iran

Responsibilities included: *C++ and Java development, testing, and documentation.*

Software

- **TReMer+**: A Tool for Merging and Consistency Checking of Distributed Models
Principal designer and developer.
Available from: <http://www.cs.toronto.edu/~mehrdad/tremer/>
- **iVuBlender**: A Tool for Merging Incomplete and Inconsistent Views
Principal designer and developer.

Invited Presentations

1. *Model Management for Requirements Engineering*, IFIP Working Group 2.9 on Software Requirements Engineering, Salvador, Brazil, February 2008.
2. *Matching and Merging of Statecharts Specifications*, Invited speaker to the First India Software Engineering Conference (ISEC'08), Hyderabad, India, February 2008. (Declined).
3. *A Tool for Merging Requirements Views*, University of Toronto Variability Modelling Workshop, Toronto, Canada, December 2006.
4. *Evaluating a Prototype Model Management Tool: A Glimpse of Challenges*, Invited talk at the Consortium for Software Engineering Research (CSER), Toronto, Canada, October 2006.
5. *Towards a Formal Basis for Describing Early Requirements in Reactive Systems*, McMaster University, Hamilton, Canada, February 2003. Host: Prof. Wolfram Kahl.

Personal Information

Citizenship: Canadian, Iranian

References

Steve Easterbrook
Professor
Dept. of Computer Science
University of Toronto
40 St George Street
Toronto, Ontario, M5S 2E4
Canada
416-978-3610; fax: 416-978-4765
sme@cs.toronto.edu

Additional references are available upon request.