ZAHRA SHAKERI HOSSEIN ABAD

zahra_shakeri@hms.harvard.edu
Postdoctoral Fellow, Department of Biomedical Informatics, Harvard Medical School
10 Shattuck Street, Boston, MA 02115, USA

RESEARCH INTERESTS

Health Data Science: Health Informatics, Health Data Visualization, Digital Population Health, Machine Learning, Artificial Intelligence, Natural Language Processing, Digital Health, Social Media Analysis, mHealth, Aging
Software Engineering & HCI: Data-driven Decision Making, Software Analytics Storytelling, Information Visualization, Interactive Surfaces, Visual Analytics

EDUCATION

Harvard Medical School, USA *July 2021-Present*
Postdoctoral Fellow, Health Informatics and Visualization
Supervisor: Nils Gehlenborg

University of Calgary, Canada *November 2018-July 2021*
Postdoctoral Associate, Health Informatics
Supervisor: Joon Lee

University of Calgary, Canada *2013- 2018*
PhD, Computer Science
Thesis: Managing Multitasking in Software Development Tasks Using Visual Analytics and Machine Learning
Supervisor: Ken Barker

Sharif University of Technology, Iran *2008- 2011*
MSc, Software Engineering
Thesis: Towards Tool Support for Situational Engineering of Agile Methodologies
Supervisor: Raman Ramsin

Amirkabir University of Technology, Iran *2003- 2007*
BSc, Software Engineering
Thesis: Using FOAF Profiles to Improve Bookmarking in Social Networks
Supervisor: Mohammad Boroujerdi

PUBLICATIONS

Peer-Reviewed Conferences and Journals

1. **Zahra Shakeri Hossein Abad**, Mohammad Noaeen, Adrienne Kline, Madeena Sultana, Filipe Lucini, Majed Al-jefri, Joon Lee. Digital public health surveillance:

a systematic scoping review. Nature Partner Journals Digit Medicine. 4(41):1-13, 2021.

2. **Zahra Shakeri Hossein Abad**, David Maslove, Joon Lee, Predicting Discharge Destination of Critically Ill Patients Using Machine Learning. IEEE Journal of Biomedical and Health Informatics-J-BHI, 25(3):827-837, 2020 [Impact factor: 5.2].

3. **Zahra Shakeri Hossein Abad**, Wendy Thompson, Gregory P Butler, Joon Lee. Crowdsourcing for machine learning in public health surveillance: lessons learned from Amazon Mechanical Turk. Journal of Medical Internet Research [Revision #1], February 2021.

4. **Zahra Shakeri Hossein Abad**, Wendy Thompson, Gregory P Butler, Joon Lee. Physical activity, sedentary behaviour, and sleep on Twitter: A labelled dataset for public health research. Nature Scientific Data [Under Review], March 2021.

   Zahra Shakeri Hossein Abad, and Joon Lee. Detecting Uncertainty of Mortality Prediction Using Confident Learning. The 44^{th} Annual International Conference of the IEEE Engineering in Medicine and Biology Society [Under Review], 2021.

5. Adrienne Kline, Theresa Kline, **Zahra Shakeri Hossein Abad**, and Joon Lee, Using Item Response Theory for Explainable Machine Learning in Predicting Mortality in the Intensive Care Unit: Case-Based Approach. Journal of Medical Internet Research, 22, no. 9(2020):e20268, 2020.

6. **Zahra Shakeri Hossein Abad**, Adrienne Kline, Joon Lee, Evaluation of Machine Learning-based Patient Outcome Prediction Using Patient-specific Difficulty and Discrimination Indices. The 43^{rd} Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2020.

7. Adrienne Kline, Theresa Kline, **Zahra Shakeri Hossein Abad**, Joon Lee, Novel Feature Selection for Artificial Intelligence Using Item Response Theory for Mortality Prediction. The 43^{rd} Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2020.

8. Adrienne Kline, Theresa Kline, **Zahra Shakeri Hossein Abad**, Joon Lee, Predicting Mortality in ICU Cases with Machine Learning: Incorporating Case Difficulty and Explainability Using Item Response Theory. Accepted to the Journal of Medical Internet Research.

9. Munima Jahan, **Zahra Shakeri Hossein Abad**, and Behrouz Far, Detecting Emergent Behavior in Scenario-Based Specifications using a Probabilistic Model. IEEE Tenth International Model-Driven Requirements Engineering (MoDRE). IEEE, 2020.

10. **Zahra Shakeri Hossein Abad**, Vincenzo Gervasi, and Didar Zowghi, Supporting Analysts by Dynamic Extraction and Classification of Requirements-Related

Knowledge. In proceedings of the 41^{st} ACM/IEEE International Conference on Software Engineering (ICSE'19, Technical Track), 2019 [Acceptance Rate: 20%].

11. **Zahra Shakeri Hossein Abad**, Muneera Bano, and Didar Zowghi, Zowghi, How much Authenticity can be achieved in Software Engineering Project Based courses? In proceedings of the 41^{st} ACM/IEEE International Conference on Software Engineering (ICSE'19, SE Education Track), 2019 [Acceptance Rate: 27%].

12. **Zahra Shakeri Hossein Abad**, Munib Rahman, Abdullah Cheema, Vincenzo Gervasi, Didar Zowghi, and Ken Barker, Dynamic Visual Analytics for Elicitation Meetings with ELICA. Accepted to the 26^{th} IEEE International Conference on Requirements Engineering, 2018 [**Awarded as the Best Demo/Tool**].

13. **Zahra Shakeri Hossein Abad**, Vincenzo Gervasi, Didar Zowghi, and Ken Barker, ELICA: A Requirements Elicitation Aid Tool. Accepted to the 26^{th} IEEE International Conference on Requirements Engineering Workshops (REW18), 2018.

14. **Zahra Shakeri Hossein Abad**, Vincenzo Gervasi, Didar Zowghi, and Ken Barker, Supporting Analysts by Dynamic Extraction and Classification of Requirements-relevant Information. Submitted to the 26^{th} IEEE International Conference on Requirements Engineering, 2018.

15. **Zahra Shakeri Hossein Abad**, Mohammad Noaeen, Didar Zowghi, Behrouz Far, and Ken Barker, Two Sides of the Same Coin: Software Developers' Perceptions of Task Switching and Interruption, In proceedings of the 22^{nd} International Conference on Evaluation and Assessment in Software Engineering, 2018 [Acceptance Rate: 18%].

16. **Zahra Shakeri Hossein Abad**, Oliver Karras, Kurt Schneider, Ken Barker, Mike Bauer, Task Interruption in Software Development Projects - What Makes some Interruptions More Disruptive than Others?, In proceedings of the 22^{nd} International Conference on Evaluation and Assessment in Software Engineering, 2018 [Acceptance Rate: 18%].

17. **Zahra Shakeri Hossein Abad**, Guenther Ruhe, and Mike Bauer, Task Interruptions in Requirements Engineering: Reality versus Perceptions. In proceeding of the 25^{th} IEEE International Conference on Requirements Engineering (RE'17), 2017 [Acceptance Rate: 20%].

18. **Zahra Shakeri Hossein Abad**, Alex Shymka, Jenny Le, Noor Hammad, and Guenther Ruhe, A Visual Narrative Path From Switching to Resuming a Requirements Engineering Task. In proceeding of the 25^{th} IEEE International Conference on Requirements Engineering (RE'17), 2017 [Acceptance Rate: 30%].

19. **Zahra Shakeri Hossein Abad**, Oliver Karras, Parisa Ghazi, Martin Glinz, Guenther Ruhe, and Kurt Schneider, What Works Better? A Study of Classifying Requirements. Conditionally accepted to the 25^{th} IEEE International Conference on

Requirements Engineering (RE'17), 2017 [Acceptance Rate: 30%].

20. **Zahra Shakeri Hossein Abad**, Guenther Ruhe, and Mike Bauer, Task Interruptions in Service-Oriented Software Development Projects: An Exploratory Case Study. In Proceedings of the 39th International Conference on Software Engineering Workshops (SERIP'17), Argentina, 2017.

21. **Zahra Shakeri Hossein Abad**, Mohammad Noaeen, and Guenther Ruhe, Requirements Engineering Visualization: A Systematic Literature Review. The 24^{th} IEEE International Conference on Requirements Engineering (RE'16). IEEE, Beijing, China, September 2016 [Acceptance Rate: 27%].

22. **Zahra Shakeri Hossein Abad**, Alex Shymka, Susant Pant, Ashley Currie, and Guenther Ruhe, What Are Practitioners Asking About Requirements Engineering? An Exploratory Analysis of Social Q&A Sites, 9th International Workshop on Software Product Management (IWSPM 2016), Beijing, China, September 2016.

23. **Zahra Shakeri Hossein Abad**, Reza Karimpour, Trong Tan Ho, S. M. Didar Al-Alam, Guenther Ruhe, Edward Tse, Kevin Barabash and Ian Hargreaves. Understanding the Impact of Technical Debt in Coding and Testing: An Explorative Case Study, SER&IP 2016 (ICSE 2016), USA, 2016.

24. **Zahra Shakeri Hossein Abad**, Mohammad Noaeen, Behrouz Far, and Guenther Ruhe, What Do Practitioners Say about Big Data? An Empirical Investigation of Stack Overflow, BIDMA 2016, Canada, 2016.

25. Mahshid Marbouti, Rahul Bhaskar, **Zahra Shakeri Hossein Abad**, Craig Anslow, Frank Maurer, and Leland Jackson. Designing Geovisual Analytics Application for Exploring Hydrological Data. BIDMA 2016, Canada, 2016.

26. **Zahra Shakeri Hossein Abad** and Guenther Ruhe. "Using Real Options to Manage Technical Debt in Requirements Engineering". The 23^{rd} IEEE International Conference on Requirements Engineering (RE). IEEE, 2015.

27. **Zahra Shakeri Hossein Abad**, Craig Anslow, and Frank Maurer. Multi-Surface Interactions with Geospatial Data: A Systematic Review. *In Proceedings of the ACM Conference on Interactive Tabletops and Surfaces (ITS)*, Dresden, Germany, 2014.

28. Theodore D. Hellmann, Apoorve Chokshi, **Zahra Shakeri Hossein Abad**, Sydney Pratte, and Frank Maurer. Agile Testing: A Systematic Mapping Across Three Conferences: Understanding Agile Testing in the XP/Agile Universe, Agile, and XP Conferences. *In Proceedings of the International Conference on Agile Methods in Software Development (Agile)*, Nashville, TN, 2013.

29. **Zahra Shakeri Hossein Abad**, Anahita Alipour, and Raman Ramsin. Enhancing Tool Support for Situational Engineering of Agile Methodologies in Eclipse,

In Proceedings of Software Engineering Research, Management and Applications (SERA), R. Lee (Ed.), SCI 430, Springer, 2012.

30. **Zahra Shakeri Hossein Abad**, Mahsa Hasani Sadi, and Raman Ramsin. " Towards Tool Support for Situational Engineering of Agile Methodologies", *In Proceedings of the IEEE International Asia-Pacific Software Engineering Conference (APSEC)*, Sydney, Australia, 2010.

Peer Reviewed Workshops and Posters

1. **Zahra Shakeri Hossein Abad**, Sania Moazzam, Christina Lo, Tianhan Lan, Elis Frroku, and Heejun Kim. "Loud and Interactive Paper Prototyping in Requirements Elicitation: What is it Good for?."Accepted to the 26^{th} IEEE International Conference on Requirements Engineering Workshops (REW18), 2018.
2. Mohammad Noaeen, **Zahra Shakeri Hossein Abad**, and Behrouz Homayoun Far. "Let's hear it from RETTA: A Requirements Elicitation Tool for TrAffic management systems." In proceeding of the 25^{th} IEEE International Conference on Requirements Engineering (RE'17) [**Best Poster Award**].
3. **Zahra Shakeri Hossein Abad**, Shane DV Sims, Abdullah Cheema, Montasir B. Nasir, and Payal Harisinghani. "Learn More, Pay Less! Lessons Learned from Applying the Wizard-of-Oz Technique for Exploring Mobile App Requirements." In 2017 IEEE 25^{th} International Requirements Engineering Conference Workshops (REW), pp. 132-138. IEEE, 2017.
4. Parisa Ghazi, **Zahra Shakeri Hossein Abad**, and Martin Glinz, Choosing Requirements for Experimentation with User Interfaces of Requirements Modeling Tools, In proceeding of the 25^{th} IEEE International Conference on Requirements Engineering (RE'17) [**Second Best Poster Award**].
5. **Zahra Shakeri Hossein Abad**, Reza Karimpour, Trong Tan Ho, S. M. Didar Al-Alam, and Guenther Ruhe. Understanding the Impact of Technical Debt in Coding and Testing: An Explorative Case Study, CPSCID 2015, Calgary, Canada, 2015. [**Selected as first place in CPSCID 2015**]
6. **Zahra Shakeri Hossein Abad**, and Guenther Ruhe. Using Real Options to Improve Requirement Debt Decisions Under Uncertainty: A Visual Analytics Approach, CPSCID 2015, Calgary, Canada, 2015.
7. Rahul Kamal Bhaskar, Julia Paredes, **Zahra Shakeri Hossein Abad**, Zahra Sahaf, Haleh Alemasoom, and Craig Anslow. VACI: Towards Visual Analytics for Criminal Investigation. *In Proceedings of the IEEE Visual Analytics Science and Technology (VAST) Challenge*, Paris, France, 2014.
8. Zahra Sahaf, Haleh Alemasoom, Rahul Kamal Bhaskar, Julia Paredes, **Zahra**

Shakeri Hossein Abad, and Craig Anslow. TrackVis: A Visualization Tool for Analyzing Movement and Tracking Data of Criminal Activities. *In Proceedings of the IEEE Visual Analytics Science and Technology (VAST) Challenge*, Paris, France, 2014.

9. **Zahra Shakeri Hossein Abad**, Rahul Kamal Bhaskar, Mahshid Marbouti, Leland Jackson, and Frank Maurer. Water Management System: A Visual Analytics Approach, CPSCID 2014, Calgary, Canada, 2014.

Theses and Technical Reports

1. **Zahra Shakeri Hossein Abad.** *Managing Multitasking in Software Development Tasks Using Visual Analytics and Machine Learning*, Department of Computer Science, University of Calgary, 2018.
2. Mahshid Marbouti, Rahul Bhaskar, **Zahra Shakeri Hossein Abad**, Craig Anslow, Frank Maurer, and Leland Jackson. "Designing Geovisual Analytics Application for Exploring Hydrological Data." Technical Report, TR-2015-1073-06, University of Calgary, 2015.
3. **Zahra Shakeri Hossein Abad.** *Towards Tool Support for Situational Engineering of Agile Methodologies*, Department of Computer Engineering, Sharif University of Technology. Masters (MSc) Thesis, 2011.
4. **Zahra Shakeri Hossein Abad.** *Using FOAF Profiles to Improve Bookmarking in Social Networks*, Department of Computer Engineering, Polytechnic University of Tehran (AmirKabir), Bachelor Thesis, 2008.
5. **Zahra Shakeri Hossein Abad**, Mohamamd Borujerdi. *Using FOAF Profiles to Improve Social Bookmarking.* Semantic Web (SW) Lab, Technical Report SW-TR-12/2007, Department of Computer Engineering, AmirKabir University of Technology, 2007.

TEACHING EXPERIENCES

Sessional Instructor

Department of Community Health Sciences, University of Calgary
- Data 624 Advanced Exploration and Visualization in Health *Winter 2021*

Department of Community Health Sciences, University of Calgary
- Data 624 Advanced Exploration and Visualization in Health *Winter 2020*

I received a 7/7 overall evaluation on the Universal Student Ratings of Instructions survey

Department of Electrical and Computer Engineering, University of Calgary
- ENSF 645 Data Mining & Knowledge Discovery *Spring 2019*
- ENSF 619.25 Machine Learning *Winter 2019*

Department of Mathematics and Computing, Mount Royal University
- COMP2613 Introduction to Computability (13 students) *Fall 2019*
I received a 5.8/6 overall evaluation on the Universal Student Ratings of Instructions survey
- COMP2613 Introduction to Computability (13 students) *Fall 2018*
I received a 5.9/6 overall evaluation on the Universal Student Ratings of Instructions survey
- COMP 5304 Programming IV-Software Engineering *Fall 2018*
I received a 5.6/6 overall evaluation on the Universal Student Ratings of Instructions survey

Department of Computer Science, University of Calgary
- SENG300 Analysis and Design of Large-Scale Software (65 students) *Spring 2018*
I received a 6.67/7 overall evaluation on the Universal Student Ratings of Instructions survey (compare to department average: 5.7)

Department of Mathematics and Computing, Mount Royal University
- COMP2613 Introduction to Computability (24 students) *Fall 2017*
I received a 5.6/6 overall evaluation on the Universal Student Ratings of Instructions survey

Department of Computer Science, University of Calgary
- SENG301 Analysis and Design of Large-Scale Software (45 students) *Spring 2017*
I received a 6.63/7 overall evaluation on the Universal Student Ratings of Instructions survey (compare to department average: 5.9) - SENG301 Analysis and Design of Large-Scale Software (133 students) *Winter 2016*
I received a 6.24/7 overall evaluation on the Universal Student Ratings of Instructions survey (compare to department average: 5.81)

Department of Computer Science, University of Abrar *Sep 2011- Jan 2013*
- SE401 Object Oriented Design *Fall 2012*
- CS353 Introduction to Computability *Winter 2012*
- SE203 Software Engineering *Winter 2012*
- SE201 Discrete Mathematics for Computer Engineering Students *Fall 2011*
- CS252 English for Computer Science Students *Fall 2011*

Teaching Assistant
Department of Computer Science, University of Calgary *Sep 2013- Present*
- CPSC313 Introduction to Computability (Evaluation result: 66/70) *Winter 2017*
- CPSC313 Introduction to Computability (Evaluation result: 67/70) *Fall 2016*
- CPSC313 Introduction to Computability (Evaluation result: 63/70) *Fall 2015*

- CPSC594 Software Engineering Project (Industrial Projects) *Winter 2015*
- CPSC594 Software Engineering Project (Industrial Projects) *Fall 2014*
- CPSC313 Introduction to Computability (Evaluation result: 62/70) *Winter 2014*
- SENG301 Analysis and Design of Large-Scale Software (Evaluation result: 61/70) *Fall 2013*

Department of Computer Engineering, Sharif University of Technology Sep 2009- Jan 2011
- Software Development Methodologies *Fall 2011*
- Patterns in Software Engineering *Winter 2011*
- Software Development Methodologies *Fall 2010*

Learning Assistant
Department of Electrical and Computer Engineering, University of Calgary Sep 2015- Jan 2017
- ENGG233 Computing for Engineers *Fall 2016*
- ENGG233 Computing for Engineers *Fall 2015*

Invited Talks and Tutorials

2020 Women in Data Science 2020, WiDS'20 (Keynote Speaker), Calgary. *The Double-edged Sword of AI in Health Data Science.*

2019 Centre for Health Informatics, Cumming School of Medicine, University of Calgary. *Does better data beat better learning algorithms?*

2016 University of Calgary, Department of Computer Science. *Systematic Literature Review: Methods and Techniques.*

RESEARCH FUNDINGS

2020 Co-Investigator– The Costs and Benefits of Transitioning from ICD-10-CA to ICD-11 in Canada. The Canadian Institutes of Health Research (CIHR). PI: Dr. Catherine Ann Eastwood. $283,051.

2015 Canada Graduate Scholarship, NSERC. $25,500.

PROFESSIONAL EXPERIENCE

Research Scientist
Chata.ai Inc., Calgary *January 2018- May 2018*
- Developed machine learning algorithms for efficiently classifying unstructured text, including information extraction, translation, and summarization.
- Applied visual analytics techniques to present the analytical results

Research Assistant

University of Calgary and ARCURVE Inc. *Aug 2015- Jan 2018*

- Worked on a research project to understand the impact of delay and tasks interruptions in software development projects

University of Calgary and SMART Technologies *Aug 2014- Dec 2014*

- Worked on a research project to understand the impact of technical debt in coding and testing

Department of Computer Science, University of Calgary *May 2013- Sep 2013*

- Worked on Square Kilometre Array (SKA) Project to explore software engineering concepts in cloud computing

Internship Experiences

Microsoft (Microsoft Dynamics CRM, Seattle, US) *Spring 2016*

- Data Analysis and Visualization, Software Engineer

ITS (Integrated Tax System), Iran *Jan 2012- Sep 2012*

- Supervisor and Software Engineer in ITS Pproject

ITRC (Education and Research Institute for ICT), Iran *Jul 2010- Sept 2012*

- Software Engineer in developing an enterprise application

CPMIS Project, Sharif University of Technology, Iran *Jan 2011- Sept 2011*

- Member of the Risk Management Team

Software Developer

SKA (Square Kilometre Array) Project *May 2013- Sep 2013*

Department of Computer Science and the Physics Department, University of Calgary

- Developed API for different cloud providers (Amazon Web Service, Windows Azure, HEROKU, Google App Engine, Google Computing Engine)

Water Management System (IBM Project) *Sep2013- Apr 2014*

Department of Computer Science, University of Calgary

- Analyzed and visualized flood data to predict flood in Calgary

C4i (Multi-surface Environments for Emergency Response Planning) *May 2014- Sep 2014*

Department of Computer Science, University of Calgary

- Developed an emergency management system for operations centres involving visual analytics and big data within a multi-surface environment.

Supervision and Mentoring

Department of Computer Science, and Department of Electrical and Computer Engineering, University of Calgary *2016-2019*

- Fauziya Shaikh [MSc]: Traffic Information Exploration from Twitter *Spring 2019*
- Jason Robert Kraft [MSc]: Producing Frames of Animation using a Convolutional Network for Filter Composition *Winter 2019*
- Payal Harisinghani [BSc]: The Application of NLP and Machine Learning Techniques to Explore Mobile App Requirements *Spring 2017*
- Montasir B Nasir [BSc]: The Application of NLP and Machine Learning Techniques to Explore Mobile App Requirements *Spring 2017*
- Abdullah Cheema [BSc]: The Application of NLP and Machine Learning Techniques to Explore Mobile App Requirements *Spring 2017*
- Shane Sims [BSc]: The Application of NLP and Machine Learning Techniques to Explore Mobile App Requirements *Spring 2017*
- Noor Hammed [BSc]: Interruption Analysis in Software Development Projects *Winter 2017*
- Jenny Le [BSc]: Interruption Analysis in Software Development Projects *Winter 2017*
- Alex Shymka [BSc]: Interruption Analysis in Software Development Projects *Winter 2017*
- James Raleigh [BSc]: Tasks Interruption Analysis in Software Development Projects *Fall 2016*
- Alex Shymka [BSc]: Designing and Developing a Requirements engineering Tool *Summer 2016*
- Susant Pant [BSc]: Visual Analytics for Requirements Engineering *Summer 2016*
- Ashley Currie [BSc]: Mining Software Repositories *Summer 2016*

Department of Computer Science, University of Abrar *2012-2013*

- Elham Kashef [BSc]: Cloud Computing for Software Engineering, *BSc Supervisor*
- Nazanin Shafaghi [BSc]: Security Concerns in Cloud Computing, *BSc Supervisor*

Administrative Responsibilities

A member of the Limited-term Instructor Selection Hiring Committee *Summer 2016*
University of Calgary, Department of Computer Science

Development Skills

Programming Languages	Python, R, C++, C#, Java
Protocols & APIs	XML, REST
Databases	MySQL, Microsoft SQL, NoSQL, MongoDB
Tools	Tableau, PowerBI, SVN, Vim, Git, ArcGIS

PROFESSIONAL SERVICE

Leadership Experiences

Member of Organizing Team in Women in Data Science- WiDS'20 *Sep 2019-March 2020*
University of Calgary

IEEE Vice President Advertising *Apr 2016-Apr 2017*
University of Calgary, Southern Alberta Section, IEEE

Graduate Coaching Facilitator in Student Success Centre (SSC) *Jan 2016-Sep 2017*
University of Calgary

Vice President-Academic of Computer Science Graduate Students (CSGS) *Apr 2015-Apr 2016*
University of Calgary, Department of Computer Science (Volunteer)

Member of the Women's Resource Centre (WRC) *Jan 2015-June 2015*
University of Calgary (Volunteer)
- Peer helper in Events and Education Coordination Team and Male Allies

Graduate Peer Coach in Student Success Centre (SSC) *Jan 2015-Apr 2017*
University of Calgary
- Coaching graduate students at the University of Calgary to increase their accountability and help them stay on track to complete their degree.

Vice President-External of Computer Science Graduate Students (CSGS) *Sep 2014-Apr 2015*
University of Calgary, Department of Computer Science (Volunteer)

Facilitator in Student Success Centre (SSC) *Sep 2014-Apr 2017*
University of Calgary (Volunteer)
- Facilitator of the boot camp writing sessions for graduate students, SSC, University of Calgary

Technical Program Committees
- IEEE International Workshop on Crowd-Based Requirements Engineering (PC mem-

ber) *2020*
- IEEE Natural Language Processing for Requirements Engineering [NLP4RE] (PC member) *2019*
- IEEE International Requirements Engineering Conference [RE] (PC member) *2019*
- IEEE International Requirements Engineering Conference [RE] (PC member) *2018*
- Journal of Systems and Software [JSS] (Reviewer) *2018*
- Journal of Systems and Software [JSS] (Reviewer) *2017*
- IEEE International Requirements Engineering Conference [RE] (Reviewer) *2017*
- The Journal of Information and Software Technology [IST] (Reviewer) *2016*
- The Asia-Pacific Software Engineering Conference [APSEC] (Reviewer) *2016*
- IEEE LCN BIDMA (PC Member) *2016*
- IEEE International Requirements Engineering Conference [RE] (Reviewer) *2016*
- IEEE CS and ACM International Conference on Software Engineering [ICSE] (Reviewer) *2015*

AWARDS, HONOURS

- Libin Cardiovascular Institute of Alberta Postdoctoral Scholarships, University of Calgary *Fall 2020*
- Finalist for the first Postdoc Research Slam Award, the University of Calgary *Fall 2019*
- Cumming School of Medicine Postdoctoral Scholarships, University of Calgary *Winter 2019*
- Libin Cardiovascular Institute of Alberta Postdoctoral Scholarships, University of Calgary *Winter 2019*
- Nominated for the 2019 ACM Distinguished Doctoral Dissertation Award *September 2019*
- Excellence in Teaching Award, GSA, University of Calgary *April 2018*
- Nominated for the University of Calgary Teaching Award *Winter 2018*
- Nominated for the Internationalization Achievement Awards, University of Calgary *Fall 2017*
- Computer Science Department Research Award, University of Calgary *Fall 2016*
- Eyes High International Doctoral Scholarship, Fall 2016 *Fall 2016*
- Computer Science Department Research Award, University of Calgary *Winter 2016*
- Faculty of Graduate Studies Travel Award, University of Calgary *Fall 2015*
- Computer Science Department Research Award, University of Calgary *Fall 2015*
- Graduate Excellence Award, Department of Computer Science, University of Calgary *Winter 2015*
- Computer Science Department Research Award, University of Calgary *2013-2014*
- Second Place in the Computer Science Department (MSc), Sharif University of Technology *2011*
- Ranked Top 1% (62^{nd}/30,000) in the National University-Entrance Exam (MSc) *2008*