

Leila Sadat Rezai

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SUMMARY OF QUALIFICATIONS

- Solid knowledge of user-centred design principles and user research methods, well-experienced in user testing
- Exceptional observation skills to understand user needs and model user behaviour
- Four years of programming experience and enthusiastic about learning new languages and new technologies
- Strong analytical and problem solving abilities to achieve sustainable results
- Strong communication and interpersonal skills, work well individually and in a team environment

COMPUTER SKILLS

- **Programming:** C, VC++, MySQL, Python; basic knowledge of HTML5, CSS, Javascript
- **Software Tools:** UML, Balsamiq, SPSS Statistics, SPSS Modeler; basic knowledge of Adobe Photoshop, Axure, IBM Integration Bus, IBM DB 2.0, MATLAB

RESEARCH EXPERIENCE

Research Assistant, Advanced Interface Design Lab, University of Waterloo, Canada Sept. 2012 – Present

- Exploring novel user experience approaches for designing engaging systems, particularly e-health and m-health systems. Research involves conducting experimental studies and statistical data analyses with the goal of producing design guidelines for system designers.
- Designed and developed an engaging user interface for a home health-monitoring mobile app aimed at increasing patient adherence to medical regimen. Gamification and persuasive design strategies were used in the design of the system. Prototype was evaluated at St. Mary General Hospital in Kitchener by elderly heart failure patients. Sponsored by Medtronic.
- Designed and developed an effective user interface for a decision support tool for mobile devices aimed at presenting emergency department waiting times information to patient population. Prototype was presented to St. Mary Hospital's board of directors and was evaluated for its usability in a user study. Sponsored by Oculys Health Informatics Inc.
- Supervised two co-op students and two undergraduate research assistants

Research Assistant, University of Toronto, Department of Computer Science, Canada Jan. 2009 – June 2010

- Master's dissertation: Designed and implemented a mobile phone application aimed at understanding the effect of Parkinson's disease on touch-based selection and scrolling tasks. Application developed in Python for S60.

Research Assistant, University of Toronto, Department of Computer Science, Canada Sept. 2009 – Oct. 2009

- Collaborated in research with Microsoft Research on developing a new method of text input system for mobile devices.

Practicum, Fraunhofer Institute for Applied Information Technology, Bonn, Germany April 2007 – July 2007

- Designed and implemented a large public display application to enable cooperative management and to aggregate info from diverse users' specific web sources. Elicited system requirements and components. Wrote SQL scripts.

Practicum, Fraunhofer Institute for Applied Information Technology, Bonn, Germany Nov. 2006 – Mar. 2007

- Designed and implemented an Eigenface-based facial recognition application to classify faces from a noisy input image. Application was developed in MATLAB.

Practicum, Accenture, Aachen, Germany May 2006 – Jul. 2006

- Designed an electronic voting system using Digital Pen & Paper technology for government agencies to speed up counting of ballots and reduce human error in vote counting. Analyzed processes, workflows and components; defined system requirements.

EMPLOYMENT

IBM Extreme Blue Technical Intern, Ottawa, Canada May 2014 – Aug. 2014

- Collaborated on a research project for developing a predicative personalized healthcare solution for cancer survivors
- Conducted requirements analysis and developed predictive models; an initial prototype was presented to IBM high-level executives in Armonk, including Ginni Rometty

Teaching Assistant, University of Waterloo, Waterloo, Canada

- Interface Design Course (for 4th year undergraduate students) Jan. 2014 – Apr. 2014
- Introduction to Design Course (for 3th year undergraduate students) May 2013 – Aug. 2013
- Positions Involved: Assisting students one-on-one in tutorial session to better understand the material, facilitate parts of

Research Associate, Technology for Aging Gracefully Lab, University of Toronto, Toronto Nov. 2010 – Feb. 2011

- Collaborated on a research project for developing hardware and software for an Accessible Large-print Listening and Talking (ALLT) eBook for blind and visually impaired individuals. Investigated the alternative interaction methods for augmenting accessibility for individuals with visual and motor impairment; wrote research grant proposal.

Researcher and Analyst, Iran Telecommunication Research Center, Tehran, Iran Apr. 2004 – June 2004

- Collaborated on a research project that envisioned the future of business processes in the telecommunications industry in order to improve the quality and efficiency of existing operational and business processes to meet enhanced Telecom Operation Map (eTOM) standards. Analyzed the current processes, and specified the future processes, activities, and logical components by brainstorming; UML and paper prototyping.

Researcher and Developer, Iran Telecommunication Research Center, Tehran, Iran June 2000 – Apr. 2004

- Collaborated on a research project for designing and implementing of a Unified Messaging System to integrate different electronic messaging and communications media including e-mail, SMS, fax, and voicemail into a single interface accessible from a variety of different portals. Developed and tested the software application with Visual C ++ codes and SQL scripts; troubleshoot problems of installed UM Systems.

EDUCATION

- **Ph.D.** Candidate in System Design Engineering, GPA: 86.33 Dec. 2016 (expected)
University of Waterloo Waterloo, Canada
- **M.Sc.** in Media Informatics (Computer Science & Multimedia Technology), GPA: A 2010
RWTH Aachen University of Technology and University of Toronto Germany and Canada
- **B.Sc.** in Electrical Engineering 2000
Sharif University of Technology Tehran, Iran

SELECTED COURSEWORK

- Research Design & Methods, Human Factors Testing, Advanced Statistics for Research: Advanced Analysis of Variance
- Design for User Engagement, Serious and Persuasive Games, Designing Interactive Systems, Computer Supported Cooperative Work & Groupware
- Requirement Engineering, Object Oriented Software Construction, Speech Technology for Multimodal Interaction and Multimedia Application using VoiceXML, Multimedia Analysis and Retrieval
- Theories of Pictorial and Verbal Human Communication, Mobile Culture: Exploration of Social and Psychological Aspects of Mobile Devices, Self-Regulation and Motivation
- Foundations of Project Management (Mitacs Steps Workshop)

PUBLICATIONS & PATENT APPLICATION

- Mercer, K, Baskerville, NB, Burns, C, Chang, F, Giangregorio, L, Tomasson Goodwin, J, **Leila S. Rezai**, Grindrod, K. Using a collaborative research approach to develop an interdisciplinary research agenda for the study of mobile health interventions for older adults. Journal of Medical Internet Research mHealth 2015
- **Leila S. Rezai**, Catherine Burns; "Work Domain Analysis for a Blood Pressure Management," Proceedings of International Symposium on Human Factors and Ergonomics in Healthcare 2014
- **Leila S. Rezai**, Gerard Torenvliet, Catherine Burns; "Increasing Patient Adherence to Home Health-Monitoring Systems" Proceedings of International Symposium on Human Factors and Ergonomics in Healthcare 2014
- James Scott, Shahrm Izadi, **Leila S. Rezai**, Dominka Ruszkowski, Xiaojun Bi, Ravin Balakrishnan, "Reartype: Text Entry using Keys on the back of a Device," International Conference on Human-Computer Interaction with Mobile Devices 2010
- Attanapola, K.L.; ChengLi, K. D.; Giffen, P. R.; Lall, S.; Rotaru, M.; **Sadat Rezai, L.**; "Predictive Analytics Work Lists for Healthcare" U.S. Patent Application No. IPCOM000239849D, December 4, 2014.

AWARDS & MEMBERSHIPS

- UW/NSERC Graduate Scholarship
- Queen Elizabeth II Graduate Scholarship in Science and Technology
- Award for 2nd "Most Useful Application" at Student Innovation Contest of ACM Symposium on User Interface Software
- Member of Human Factors and Ergonomics Society
- Member of Ontario Society of Professional Engineers

VOLUNTEER EXPERIENCE

- Volunteered at Hack the North, Canada's largest international hackathon 2014, Waterloo, Canada
- Volunteered at Gamification 2013 Conference 2013, Stratford, Canada
- Volunteered at National Institute of Health Informatics Boot camp 2013, Waterloo, Canada

PERSONAL INTERESTS

Reading (psychology, literature), drawing, yoga, travelling