

# ZOHREH SHARAFI

## Researcher & Software Developer

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## EXPERIENCE

### Technology Associate

#### Morgan Stanley

📅 August 2015 – Ongoing

📍 Montréal, Canada

- Contribute to the development of the firm's lead electronic-trading application for listed securities
- Developed a market data simulator to improve the debugging process

### Technology Analyst

#### Morgan Stanley

📅 August 2015 – October 2015

📍 New York, US

- Participated in a 15-week, intensive, global training program
- Developed a fully automated reporting system

### Co-founder, Data Analyst, and Software Developer

#### Digital Brain Zone (Angel.co Page)

📅 Feb 2013 – Feb 2015

📍 Montréal, Canada

- Contributed to the development of Smart Park mobile application

### Technology Summer Analyst

#### Morgan Stanley

📅 May 2014 – August 2014

📍 Montréal, Canada

- Developed a fully automated query and data analysis system

## RESEARCH

### Graduate Researcher

#### Université de Montréal, Ecole Polytechnique de Montréal

📅 Aug 2010 – May 2015

📍 Montréal, Canada

- Performed a set of explanatory studies to examine the impact of different code representations on developers' efficiency
- Conducted a systematic literature review on the usage of eye-tracking technology in software engineering

### Graduate Researcher

#### Concordia University

📅 Aug 2008 – August 2010

📍 Montréal, Canada

- Designed a Platform Independent Metamodel (PIM) for Aspect-oriented Programming using UML

### Student Researcher

#### Institute for research in Physics and Mathematics (IPM)

📅 Aug 2008 – August 2006

📍 Tehran, Iran

- Developed an image transformation tool for making panoramic images

## EDUCATION

### Ph.D. in Computer Engineering

#### Université de Montréal, Ecole Polytechnique de Montréal

📅 Sept 2010 – Aug 2015

Thesis: [On the Influence of Representation Type And Gender on Program Comprehension](#)

Supervisors: [Dr. Giuliano Antoniol](#) and [Dr. Yann-Gaël Guéhéneuc](#)

### M.A.Sc. in Software Engineering

#### Concordia University

📅 August 2008 – August 2010

Thesis: [A platform-independent AOP patterns to support model transformations](#)

Supervisor: [Dr. C. Constantinides](#)

### B.Sc. in Computer Engineering

#### University of Tehran

📅 August 2004 – August 2008

## AWARDS



#### NSERC Postdoctoral Fellowship

📅 Starting January 2019

Natural Sciences and Engineering Research Council of Canada Postdoctoral Fellowship



#### Team Spirit and Recruitment Rocky of the Year Awards

📅 May 2016 and May 2017

For showing excellence and making a notable contribution to firm's campus recruiting



#### Polytechnique Montréal Ph.D. Admission Bursary

📅 August 2010 - Sep 2013



#### FQRNT Doctoral Research Grant

📅 Aug 2012 – Aug 2014

Fonds de Recherche du Québec-Nature et Technologies Scholarship for Doctoral Study



#### International Tuition Fee Remission Award - Concordia University

📅 Sept 2009 – Aug 2010

# PUBLICATIONS

[Statistics] [DBLP] [Research Gate]

## Peer-reviewed Journal Articles

- Zohreh, Sharafi, Sharif Bonita, et al. (2017). "A Practical Guide on Why, When, and How to Conduct Eye tracking Studies in Software Engineering". In: *In progress*.
- Ali, Nasir, Zohreh Sharafi, et al. (2015). "An empirical study on the importance of source code entities for requirements traceability". In: *Empirical Software Engineering* 20.2, pp. 442–478.
- De Smet, Benoit et al. (2014). "Taupe: Visualizing and analyzing eye-tracking data". In: *Science of Computer Programming* 79, pp. 260–278.

## Conference Proceedings

- Zohreh, Sharafi, Timothy Shaffer, et al. (2015). "Eye-tracking Metrics in Software Engineering". In: *Asia-Pacific Software Engineering Conference (APSEC)*. IEEE, pp. 96–103.
- Zohreh, Sharafi, Alessandro Marchetto, et al. (2013). "An empirical study on the efficiency of graphical vs. textual representations in requirements comprehension". In: *21st IEEE International Conference on Program Comprehension (ICPC)*. IEEE, pp. 33–42.
- Ali, Nasir, Zohreh Sharafi, et al. (2012). "An empirical study on requirements traceability using eye-tracking". In: *28th IEEE International Conference on Software Maintenance (ICSM)*. IEEE, pp. 191–200.
- Soh, Zéphyrin et al. (2012). "Professional status and expertise for UML class diagram comprehension: An empirical study". In: *20th IEEE International Conference on Program Comprehension (ICPC)*. IEEE, pp. 163–172.
- Zohreh, Sharafi, Zéphyrin Soh, et al. (2012). "Women and men—Different but equal: On the impact of identifier style on source code reading". In: *20th IEEE International Conference on Program Comprehension (ICPC)*. IEEE, pp. 27–36.
- Zohreh, Sharafi, Parisa Mirshams, et al. (2010). "Extending the UML metamodel to provide support for crosscutting concerns". In: *8th ACIS International Conference on Software Engineering Research, Management and Applications (SERA)*. IEEE, pp. 149–157.
- Zohreh, Sharafi, Niloofar Gheissari, et al. (2008). "Model Based Global Image Registration". In: *3rd International Conference on Computer Vision Theory and Applications (VISAPP)*. IEEE, pp. 440–455.

# REVIEWER

- (EMSE 2018) Empirical Software Engineering journal
- (ICSME 2017) IEEE International Conference on Software Maintenance and Evolution - NIER Track
- (JEMR 2016) Journal of Eye Movement Research
- (JEMR 2016) Journal of Eye Movement Research
- (ICPC 2014) IEEE International Conference on Program Comprehension - ERA Track
- (PATTERNS 2012) International Conferences on Pervasive Patterns and Applications

# RESEARCH INTEREST

Empirical Software Engineering


Program Comprehension


Software maintenance

Human Computer Interaction

Eye-tracking in software engineering

# TEACHING

 **Code Club Canada - 2018**  
Run free coding clubs class for children aged 8-12 to learn [Scratch](#)

 **Concordia University - 2010**  
Management, Measurement and Quality control

 **University of Tehran - 2008**  
Software Engineering (System Analysis and Design)

 **University of Tehran - 2008**  
Compilers

# SOFTWARE SKILLS

DATA ANALYSIS	R, Matlab, Python, Excel
PROGRAMMING	Java, C/C++, C#
FRAMEWORK	.Net, WPF, Infragistics, Struts, Swing
DATA MNGT:	DB2, SQLServer, JDBC
WEB DEV:	JSP, Java Servlet, JavaScript, XML/HTML,RMI, Apache Tomcat
DEV TOOLS:	Eclipse, Visual Studio, VIM, JUnit, Git, SVN
SOFTWARE ENG:	Design Patterns, Object-oriented design, Model-driven Architecture, Agile, RUP, UML/xUML

# REFEREES

**Prof. Giuliano Antoniol**

@ antoniol@ieee.org

✉ Ecole Polytechnique de Montréal, Montréal, Canada

**Prof. Yann-Gaël Guéhéneuc**

@ yann-gael.gueheneuc@polymtl.ca

✉ Concordia University, Montréal, Canada

## SERVICE

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### 📖 Program Committee Member

- ([ICPC 2014](#)) IEEE International Conference on Program Comprehension - ERA Track

### ☰ Organizing Committee Member

- ([SANER 2015](#)) International Conference on Software Analysis, Evolution, and Reengineering (Student Volunteer)
- ([PPAP 15](#)) Workshop on Patterns Promotion and Anti-patterns Prevention (Student Volunteer)
- ([SSBT 12](#)) 8th International Workshop on Search-Based Software Testing (Student Volunteer)

## LANGUAGES

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English  
Persian  
French

