

Minhaz F. Zibran, PhD

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Current Position

Assistant Professor [Jan 2015 – to date]
Director of the **Laboratory for Software Engineering Research (LaSER)**
Department of Computer Science, University of New Orleans, LA, USA.

Academic Qualification

- 2009 – 2014 Ph.D. in Computer Science (CGPA 90.5%)
Department of Computer Science, University of Saskatchewan, Canada.
Thesis: Management Aspects of Software Clone Detection and Analysis
- 2005 – 2007 M.Sc. in Computer Science (CGPA 4.0 out of 4.0)
Department of Mathematics and Computer Science, University of Lethbridge, Canada.
Thesis: A Multi-phase Approach to University Course Timetabling
- 1999 – 2002 B.Sc. in Computer Science and Information Technology (CGPA 4.69 out of 5.0)
Islamic University of Technology (IUT), Bangladesh.
Thesis: Computer Representation of Bangla Characters and Sorting of Bangla Words

Publications

Refereed Journal Contributions:

1. M. Islam and M. Zibran. Exploration and Exploitation of Developers' Sentiment Variations in Software Engineering, *International Journal of Software Innovation (IJSI)*, 4 (4): 35–55, 2016.
2. M. Zibran and C. Roy. Conflict-aware Optimal Scheduling of Code Clone Refactoring. *Journal of IET Software*, 7 (3): 167–186, 2013.
3. M. Zibran, R. Saha, C. Roy, and K. Schneider. Genealogical Insights into the Facts and Fictions of Clone Removal. *ACM Applied Computing Review*, 13 (4): 30–42, 2013.
4. M. Zibran. What Makes APIs Difficult to Use? *International Journal of Computer Science and Network Security (IJCSNS)*, 8 (4): 255–261, 2008.

Refereed Conference Contributions:

5. M. Islam and M. Zibran. Leveraging Automated Sentiment Analysis in Software Engineering. In *14th IEEE International Conference on Mining Software Repositories (MSR 2017)*, pp. 203–214, Argentina, 2017.
6. M. Islam, M. Zibran, and A. Nagpal. Security Vulnerabilities in Categories of Clones and Non-Cloned Code: An Empirical Study. In *11th ACM/IEEE International Symposium on Empirical Software Engineering and Measurement (ESEM 2017)*, 10 pages, Canada, 2017 (to appear).
7. M. Islam and M. Zibran. A Comparison of Dictionary Building Methods for Sentiment Analysis in Software Engineering Text. In *11th ACM/IEEE International Symposium on Empirical Software Engineering and Measurement (ESEM 2017)*, 02 pages, Canada, 2017 (to appear).
8. M. Islam and M. Zibran. Insights into Continuous Integration Build Failures. In *14th IEEE International Conference on Mining Software Repositories (MSR 2017)*, pp. 467–470, Argentina, 2017.
9. M. Islam and M. Zibran. Towards Understanding and Exploiting Developers' Emotional Variations in Software Engineering. In *14th IEEE/ACIS International Conference on Software Engineering Research, Management and Applications (SERA 2016)*, pp. 185–192, Baltimore, USA, 2016 (invited at the *Journal of Software Innovation*).

10. M. Zibran. On the Effectiveness of Labeled Latent Dirichlet Allocation in Automatic Bug-Report Categorization. In 38th International Conference on Software Engineering (ICSE 2016), pp. 713–715, Austin, TX, USA, 2016.
11. C. Roy, M. Zibran, and R. Koschke. The Vision of Software Clone Management: Past, Present, and Future. In IEEE CSMR-18/WCRE-21 Software Evolution Week (SEW'14), Vision Keynote, pp. 18–33, Belgium, 2014.
12. M. Zibran, R. Saha, C. Roy, and K. Schneider. Evaluating the Conventional Wisdom in Clone Removal: A Genealogy-based Empirical Study. In the 28th ACM Symposium On Applied Computing (ACM-SAC 2013), pp. 1123–1130, Portugal, 2013 (invited at the Journal of ACM Applied Computing Review).
13. T. Muhammad, M. Zibran, Y. Yamamoto, C. Roy. Near-miss Clone Patterns in Web Applications: An Empirical Study with Industrial Systems. In the 26th Annual Canadian Conference on Electrical and Computer Engineering (CCECE 2013), pp. 1–6, 2013, Canada.
14. M. Zibran and C. Roy. IDE-based Focused Search for Near-miss Clones. In the 27th ACM Symposium On Applied Computing (ACM-SAC 2012), pp. 1235–1242, Italy, 2012.
15. M. Zibran and C. Roy. A Constraint Programming Approach to Conflict-aware Optimal Scheduling of Prioritized Code Clone Refactoring. In the 11th IEEE International Working Conference on Source Code Analysis and Manipulation (SCAM 2011), pp. 105–114, USA, 2011 (one of the seven best papers invited at a special issue of the IET Software Journal).
16. M. Zibran, F. Eishita, and C. Roy. Useful, but usable? Factors Affecting the Usability of APIs. In the 18th Working Conference on Reverse Engineering (WCRE 2011), pp. 151–155, Ireland, 2011.
17. M. Zibran. Analysis and Management of Code Clones. In the doctoral symposium of the 27th IEEE International Conference on Software Maintenance (ICSM 2011), 4 pp., USA, 2011.
18. M. Zibran and C. Roy. Conflict-aware Optimal Scheduling of Code Clone Refactoring: A Constraint Programming Approach. In the student symposium of the 19th IEEE International Conference on Program Comprehension (ICPC 2011), pp. 266–269, Canada, 2011.
19. M. Zibran, R. Saha, M. Asaduzzaman, and C. Roy. Analyzing and Forecasting Near-miss Clones in Evolving Software: An Empirical Study. In the 16th IEEE International Conference on Engineering of Complex Computer Systems (ICECCS 2011), pp. 295–304, USA, 2011.
20. R. Saha, M. Asaduzzaman, M. Zibran, C. Roy, and K. A. Schneider. Evaluating Code Clone Genealogies at Release level: An Empirical Study. In the 10th IEEE International Conference on Source Code Analysis and Manipulation (SCAM 2010), pp. 87–96, Romania, 2010.
21. S. Hossain and M. Zibran. M-Sched: A University Course Timetabler. In the 7th Springer International Conference on the Practice and Theory of Automated Timetabling (PATAT 2008), 4 pp., Canada, 2008.
22. A. Pathan, M. Mottalib, and M. Zibran. An Internet Framework to Bring Coherence between WAP and HTTP Ensuring Better Mobile Internet Security. In the 8th IEEE International Conference on Advanced Communication Technology (ICACT 2006), Vol. 1, pp. 215–220, Korea, 2006.
23. A. Pathan and M. Zibran. Ensuring Security in WAP and Usability in WAP Applications. In the 8th IEEE International Conference on Computer and Information Technology (ICCIT 2005), pp. 780–785, Bangladesh, 2005.
24. M. Zibran, A. Tanvir, M. Rajiullah, and M. Sattar. Computer Representation of Bangla Characters and Sorting of Bangla Words. In the 5th IEEE International Conference on Computer and Information Technology (ICCIT'2002), pp. 191–195, Bangladesh, 2002.

Refereed Workshop Contributions:

25. M. Islam and M. Zibran. A Comparative Study on Vulnerabilities in Categories of Clones and Non-Cloned Code. In proceedings of the 10th IEEE International Workshop on Software Clones (IWSC 2016), pp. 8–14, Japan, 2016 (winner of best paper award).

26. M. Zibran. Towards Implementation of an Integrated Clone Management Infrastructure. In 10th IEEE International Workshop on Software Clones (IWSC 2016), pp. 60–61, Japan, 2016.
27. M. Zibran. Analysis and Visualization for Clone Refactoring. In 9th IEEE International Workshop on Software Clones (IWSC 2015), pp. 47–48, Canada, 2015.
28. M. Zibran and C. Roy. Towards Flexible Code Clone Detection, Management and Refactoring in IDE. In 5th ACM International Workshop on Software Clones (IWSC 2011), pp. 75–76, USA, 2011.
29. S. Hossain and M. Zibran. A Multi-phase Approach to the University Course Timetabling Problem. In the 6th Cologne-Twente Workshop on Graphs and Combinatorial Optimization, pp. 73–76, The Netherlands, 2007.
30. M. Pathan, M. Zibran, and M. A. Mottalib. An HTTP-WAP Framework to Bring Coherence in Wired and Wireless Internet Ensuring Better Mobile Internet Security. In the 1st Workshop on Prospects and Problems of Mobile and Land Phones in Bangladesh, Independent University, Bangladesh (IUB), pp. 53-60, 2005.

Posters and Tool Demonstrations:

31. M. Zibran, C. Roy, and K. A. Schneider. Topic Modeling for Bug-report Categorization. In the CSER (Consortium for Software Engineering Research) 2014 Spring Meeting (poster session), Edmonton, Canada, 5 May 2014.
32. M. Zibran. Diagnosis and Treatment of Code Clones. In poster symposium of the 27th IEEE International Conference on Software Maintenance (ICSM 2011), USA, 2011.
33. M. Zibran and C. Roy. Code Clones: Etiology, Effects, and Treatment. In the CSER (Consortium for Software Engineering Research) 2011 Spring Meeting (poster session), Ontario, Canada, 21 June 2011.
34. M. Zibran and C. Roy. Cloning in Software: Why, When, and How?. In the College of Arts and Science Graduate Students Poster Symposium, University of Saskatchewan, Canada, 19 April 2011.
35. M. Zibran and C. Roy. Flexible Code Clone Detection and Management in IDE. In the Technology showcase in the 20th Annual Conference (CASCON 2010), Centre for Advanced Studies Research, IBM Canada Software Laboratory, Canada, 2010.
36. M. Zibran. A Multi-phase Approach to Automated Course Timetabling. Poster session in the 2007 CMS-MITACS Joint Conference, pp. 129, Manitoba, Canada, 2007.
37. A. Azim, S. Kabir, and M. Zibran. Alternative Frameworks of E-Commerce and Electronic Payment Systems Specially Suitable for the Developing Countries Like Bangladesh. Poster paper in the 8th IEEE International Conference on Computer and Information Technology (ICCIT 2005), Bangladesh, 2005.

Technical Reports and Other Contributions:

38. M. Zibran and Chanchal K. Roy. The Road to Software Clone Management: A Survey, Technical Report 2012-03, pp. 1–62, Department of Computer Science, University of Saskatchewan, Canada, 2012.
39. M. Zibran. Evaluating Test Quality, Technical Report 2012-01, pp. 1–14, Department of Computer Science, University of Saskatchewan, Canada, 2012.
40. M. Zibran. Biometric Authentication: The Security Issues, Technical Report 2012-02, pp. 1–9, Department of Computer Science, University of Saskatchewan, Canada, 2012.
41. M. Zibran. Cryptographic Security for Emails: A Focus on S/MIME, Technical Report 2011-03, pp. 1–19, Department of Computer Science, University of Saskatchewan, Canada, 2011.
42. M. Zibran. Eye Based Authentication: Iris and Retina Recognition, Technical Report 2011-04, pp. 1–56, Department of Computer Science, University of Saskatchewan, Canada, 2011.
43. T. Yeung and M. Zibran. AlouetteCanada Metadata Toolkit Usability Pilot Study. Research Findings, New Media Research and Development Initiative, The Canadian Association of Research Libraries, pp. 1–11, Canada, 2007.

Invited Talks and Presentations

1. M. Zibran. Software Systems: Friend or Foe? Invited lecture at the Spring 2017 Honors Seminar (A&S 2999), University of New Orleans, USA, February 2017.
2. M. Zibran. Clone Management: Detection and Scheduling for Refactoring. University of New Orleans, USA, November 2014.
3. M. Zibran. Detection and Analysis of Code Clones from Management Perspective. Bucknell University, USA, April 2014.
4. M. Zibran. Analysis and Management of Code Clones. University College London (UCL), UK, October 2012.
5. M. Zibran. Clone Management. In the Mini Clone Workshop at the CSER (Consortium for Software Engineering Research) 2011 Spring Meeting, Kingston, Ontario, Canada, 21 June 2011.
6. M. Zibran. Design Patterns, two lectures in the undergraduate course on Intermediate Software Engineering at the Department of Computer Science, University of Saskatchewan, Canada, Fall 2010.
7. M. Zibran. Design Patterns: design, implementation, and implications, four lectures in the undergraduate course on Intermediate Software Engineering at the Department of Computer Science, University of Saskatchewan, Canada, Fall 2009.
8. M. Zibran. Automated University Course Timetabling. Presentation in front of the administrative staff at the University of Lethbridge, Canada, 2007.
9. M. Zibran. Solving Systems of Linear Equations, three lectures in the undergraduate course on Linear Algebra at the Department of Mathematics and Computer Science, University of Lethbridge, Canada, Summer 2007.

Professional Services

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| 2016 – 2017 | Program Committee (PC) member for the 11th IEEE International Workshop on Software Clones (IWSC 2017) to be held on February 21, 2017 in Klagenfurt, Austria. |
| 2015 – 2016 | Program Committee (PC) Co-Chair for the IEEE 10th International Workshop on Software Clones (IWSC 2016) held on March 15, 2016 in Osaka, Japan. |
| 2015 – 2015 | Program Committee (PC) member for the International Workshop on Enterprise Web Application Dependability (EWAD 2016) held during 15–18 August, 2016 in Montreal, Canada. |
| 2014 – 2015 | Program Committee (PC) member for the 9th IEEE International Workshop on Software Clones (IWSC 2015) held on March 2, 2015 in Montreal, Canada. |
| 2015 – 2015 | Program Committee (PC) member for the International Workshop on Enterprise Web Application Dependability (EWAD 2015) held during 17–20 August, 2015 in Belfort, France. |
| 2013 – 2014 | Proceedings and Pamphlet Co-chair for the 22nd IEEE International Conference on Program Comprehension (ICPC 2014) held during 2–3 June 2014 in Hyderabad, India. |
| 2012 – 2013 | Web Chair for the 29th IEEE International Conference on Software Maintenance (ICSM 2013) held during 22–28 Sept 2013 in the Netherlands. |
| 2012 | Developed the official website (http://www.cser.ca/cfp/) for the CSER (Consortium for Software Engineering Research) Fall'2012 meeting held on Nov 4, 2012 in Markham, Ontario, Canada. |
| 2011 – 2012 | Web Chair for the 12th IEEE International Conference on Source Code Analysis and Manipulation (SCAM 2012) held during 23–24 Sept 2012 in Italy. |
| 2011 – 2012 | Program Committee (PC) Member for the 20th IEEE International Conference on Program Comprehension (ICPC) held during June 11–13 June, 2012 in Germany. |
| 2011 – 2012 | Program Committee (PC) Member for the 19th Working Conference on Reverse Engineering (WCRE) held during 15–18 October, 2012 at Kingston, Ontario, Canada. |
| 2010 – 2011 | Web Chair for the 19th IEEE International Conference on Program Comprehension (ICPC 2011) held during 22–24 June 2011 at the Queens University, Kingston, Ontario, Canada. |

Reviewer for Conference/Journal Publications

- 11th IEEE International Workshop on Software Clones (IWSC), Austria, 2017.
- Elsevier Journal of Systems and Software (JSS), 2016.
- IEEE Security & Privacy, 2016.
- International Workshop on Enterprise Web Application Dependability (EWAD), 2016.
- Elsevier Journal of Information and Software Technology (IST), 2015.
- Springer Software Quality Journal (SQJ), 2015.
- 9th IEEE International Workshop on Software Clones (IWSC), Canada, 2015.
- 12th International Conference on Mobile Systems and Pervasive Computing (MobiSPC), 2015.
- Mining Software Repositories (MSR 2014), India, 2014.
- 28th IEEE International Conference on Software Maintenance (ICSM), Italy, 2012.
- 12th IEEE International Working Conference on Source Code Analysis and Manipulation (SCAM), Italy, 2012.
- 20th IEEE International Conference on Program Comprehension (ICPC), Germany, 2012.
- 19th Working Conference on Reverse Engineering (WCRE), Canada, 2012.
- 18th Working Conference on Reverse Engineering (WCRE), Ireland, 2011.
- 27th IEEE International Conference on Software Maintenance (ICSM), USA, 2011.
- 11th IEEE International Working Conference on Source Code Analysis and Manipulation (SCAM), USA, 2011.
- 2011 IEEE International Conference on Multimedia and Expo (ICME), Spain, 2011.
- 17th Working Conference on Reverse Engineering (WCRE), USA, 2010.

Industry Experience

- **Intermediate Software Developer** [Oct 2012 – Sept 2013]
SED Systems - A Division of Calian Ltd., 18 Innovation Blvd, Saskatoon, SK, Canada.
– performed in teams for developing enterprise software systems using Java, C++
- **Senior Programmer Analyst** [July 2003 – Feb 2004]
Seventh Sense Software, Bangladesh.
– managed software projects and developed a specialized Knowledge Management System
- **Programmer (Java Team)** [Nov 2002 – July 2003]
Grameen Solutions Ltd., Bangladesh. (former Grameen Software Ltd.)
– performed requirement analysis, planning, and co-developed an integrated Management Information System for the special security force (SSF) of the Honorable Prime Ministers Office of Bangladesh

Trainings and Workshops

- **Learning and Engagement Strategies in Software Engineering** [June 2017]
Completed a workshop on Using Learning and Engagement Strategies in Software Engineering and Programming Courses organized by the Florida International University, USA.
- **Pedagogy and Course Design** [Aug 2014]
Completed a workshop on course design, pedagogy, and active learning organized by Bucknell University, USA.
- **Fuzzy Logic Theory and Applications** [Jan 2010]
Completed a 3.5 credit tutorial on Fuzzy Logic organized by IEEE North Saskatchewan Section, Canada.
- **Leadership Development** [June 2004]
Completed a short course on leadership development organized by Dhaka University and the British High Commission in Dhaka, Bangladesh.

Teaching Experience

- **Assistant Professor** (full time) [Jan 2015 – to date]
Department of Computer Science, University of New Orleans, LA, USA.
 - Courses Taught:
 - * Software Testing and Quality Assurance, Spring 2017
 - * Software Security, Fall 2017, Fall 2016
 - * Agile Software Engineering, Fall 2017, Fall 2016, Fall 2015
 - * Advanced Software Engineering, Spring 2016
 - * Introduction to Software Engineering, Spring 2017, Spring 2015
 - * Data Structures, Spring 2015

- **Visiting Assistant Professor** (full time) [August 2014 – Dec 2014]
Department of Computer Science, Bucknell University, PA, USA.
 - Courses Taught:
 - * Introduction to Computer Science, Fall 2014
 - * Programming Language Design, Fall 2014

- **Teaching Assistant** (part time) [Sept 2009 – April 2012]
Department of Computer Science, University of Saskatchewan, Canada.
Role and Taught Courses:
 - Instructor (involved in course design, delivering lectures, and students evaluation):
 - * Software Management, Winter 2012 (jointly with Dr. Chanchal K. Roy)
 - Tutorial Leader (designed materials for tutorials and delivered classroom lectures):
 - * Developing Object-oriented Systems, Fall 2011, Fall 2010
 - * Introduction to Computer Science and Programming, Summer 2010
 - Marker (evaluated students' assignments):
 - * Software Management, Winter 2010
 - * Principles of Computer Science, Winter 2011
 - * Introduction to Computer Science and Programming, Winter 2012
 - Guest lectures (delivered lectures on a set of topics):
 - * Intermediate Software Engineering, Fall 2010 (two lectures), Fall 2009 (four lectures)

- **Teaching Assistant** (part time) [Sept 2007 – Aug 2009]
Department of Computer Science, University of Calgary, Canada.
 - Taught Course:
 - * Introduction to Computer Science, Fall 2007, Winter 2008

- **Visiting Faculty** (full time) [May 2008 – Aug 2008]
Department of Computer Science, American International University Bangladesh.
 - Taught Courses:
 - * Object Oriented System Analysis and Design, Summer 2008
 - * Management Information Systems, Summer 2008
 - * Enterprise Resource Planning, Summer 2008

- **Teaching Assistant** (part time) [Sept 2005 – Aug 2007]
Department of Mathematics and Computer Science, University of Lethbridge, Canada.
Role and taught courses:
 - Sessional Instructor (delivered lectures in sessional classes, evaluated students assignments)
 - * Introduction to Computer Science, Winter 2006, Fall 2006
 - Marker (evaluated students' assignments):
 - * Operating Systems, Fall 2005

- **Lecturer** (full time) [Mar 2004 – Aug 2005]
Department of Computer Science and IT, Islamic University of Technology, Bangladesh.
 - Taught Courses:
 - * Visual Programming with Java, Summer 2005
 - * Unix Programming, Winter 2005
 - * Human Computer Interaction, Winter 2005
 - * Parallel and Distributed Systems, Summer 2004
 - * E-commerce and Web Design, Winter 2004

- **Lecturer** (part time) [Sept 2003 – Apr 2004]
Department of Computer Science and Engineering, Southeast University, Bangladesh.
 - Taught Courses:
 - * Object Oriented programming with Microsoft Visual C++, Winter 2004
 - * Introduction to Programming with C, Fall 2003

Students Supervision and Mentoring

- Advising one Ph.D. student, two M.Sc. students and two undergraduate students at the University of New Orleans, USA.
- Member of examination committee for Masters thesis, “Automatic Forensic Analysis of Digital Artifacts from PCCC Network Traffic Log” at the University of New Orleans, USA, 2017.
- Member of examination committee for Masters thesis, “Survey of Autonomic Computing and Experiments on JMX-based Autonomic Features” at the University of New Orleans, USA, 2016.
- Supervisor of undergraduate dissertation, “Design and Development of a Software Level (loosely-coupled) Ubiquitous Computing Grid: A Job Submission and Allocation Tool for Distributed Processing and a Way to Govern the Operations of the Home Appliances” at the Islamic University of Technology, Bangladesh, 2004.
- Supervisor of undergraduate dissertation, “An Alternative Framework of E-Commerce and Electronic Payment Systems Specially Suitable for the Developing Countries Like Bangladesh” at the Islamic University of Technology, Bangladesh, 2004.
- Coach for the Islamic University of Technology programming team for the National Computer Programming Contest held at the International Islamic University Chittagong, Bangladesh, 2004.

Community Services

2016 to date	Faculty Advisor for the Bangladeshi Students’ Association at the University of New Orleans, USA.
2015 to date	Coordinating the Software Engineering Apprenticeship Program (SWEAP) under which the undergraduate students of the Computer Science department (at the University of New Orleans) carry out internships in software industry.
2011 – 2012	Elected President of the Computer Science Graduate Course Council, Department of Computer Science, University of Saskatchewan, Canada. [lead the organization in negotiation with the department regarding the interests of the student body, and organizing social events such as fresher’s reception and coffee social]
2011 – 2012	Elected President of the Bangladeshi Students’ Association at the University of Saskatchewan (BSAUS), Canada. [lead the association in supporting the Bangladeshi students at the university, and organizing socio-cultural events in collaboration with the entire Bangladeshi community in the city]
2010 – 2011	Elected GSA (Graduate Students Association) Representative for the Computer Science Graduate Course Council, Department of Computer Science, University of Saskatchewan, Canada.

Major Relevant Awards

2017	Advisor of the year Nominee – the University of New Orleans Student Leadership Recognition Award in recognition of outstanding leadership skills and service given to the University of New Orleans in 2016-2017.
2016	Best Paper Award at the 10th IEEE International Workshop on Software Clones (IWSC 2016), Japan.
2016	NSF ICSE Travel Award for attending the 38th International Conference on Software Engineering (ICSE) in Austin, TX, USA.
2014	2nd Best Poster Award at the poster symposium of CSER Spring meeting at Edmonton, Canada.
2013, 2012	Walter C. Sumner Memorial Fellowship, Canada.
2013, 2012	ACM SIGAPP Student Travel Award, Canada.
2013	The President's Office Student Travel Award, University of Saskatchewan, Canada.
2012, 2011	College of Graduate Studies and Research Travel Award, University of Saskatchewan, Canada.
2011	Department of Computer Science Ph.D. Scholarship, University of Saskatchewan, Canada.
2009	NSERC Post Graduate Scholarship (doctoral level), Canada.
2007	Province of Alberta International Student Projects Award, Canada.
2007	Travel Grant, Graduate School, University of Lethbridge, Canada.
2001	8th position in the 26th ACM Regional Computer Programming Contest for Asia Region, Bangladesh.
1998	16th in the merit list for the Higher Secondary Certificate examination, Rajshahi Board, Bangladesh.

Professional Membership

- Professional Member, ACM Special Interest Group on Software Engineering (SIGSOFT).
- Professional Member, IEEE (Institute of Electrical and Electronic Engineering) Computer Society.