Minhaz F. Zibran, PhD

Department of Computer Science
University of New Orleans
New Orleans, LA, USA

Email: zibran@cs.uno.edu
Phone: +1 (570) 768 2888
Web: http://www.cs.uno.edu/∼zibran/

Current Affiliation

- Assistant Professor, Computer Science, University of New Orleans, USA
- Director, Laboratory for Software Engineering Research (LaSER), University of New Orleans
- Member, Greater New Orleans Center for Information Assurance (GNOCIA), University of New Orleans

Education

Ph.D., Computer Science, University of Saskatchewan, Canada	2014
M.Sc., Computer Science, University of Lethbridge, Canada	2007
B.Sc., Computer Science & IT, Islamic University of Technology, Bangladesh	2002

Publications

Refereed Journal Contributions:

1. M. Islam and M. Zibran. SentiStrength-SE: A Tool for Improved Automated Sentiment Analysis in Software Engineering Text, Journal of Systems and Software (JSS), 51 pages, 2018 (under review).
2. M. Islam and M. Zibran. Exploration and Exploitation of Developers' Sentimental Variations in Software Engineering, International Journal of Software Innovation (IJSI), 4 (4): 35–55, 2016.
3. M. Zibran and C. Roy. Conflict-aware Optimal Scheduling of Code Clone Refactoring. Journal of IET Software, 7 (3): 167–186, 2013.
4. 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.
5. 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:

6. M. Islam and M. Zibran. A Comparison of Software Engineering Domain Specific Sentiment Analysis Tools. In 25th IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER), pp. 1–5, Italy, 2018 (to appear).
7. M. Islam and M. Zibran. DEVA: Sensing Emotions in the Valence Arousal Space in Software Engineering Text. In 33rd ACM Symposium On Applied Computing (SAC), pp. 1–8, France, 2018 (to appear).
8. M. Islam and M. Zibran. Leveraging Automated Sentiment Analysis in Software Engineering. In 14th IEEE International Conference on Mining Software Repositories (MSR), pp. 203–214, Argentina, 2017.
9. 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), pp. 20–29, Canada, 2017.
10. 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), pp. 478–479, Canada, 2017.
11. M. Islam and M. Zibran. Insights into Continuous Integration Build Failures. In 14th IEEE International Conference on Mining Software Repositories (MSR), pp. 467–470, Argentina, 2017.
12. 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), pp. 185–192, Baltimore, USA, 2016 (invited at the Journal of Software Innovation).

13. M. Zibran. On the Effectiveness of Labeled Latent Dirichlet Allocation in Automatic Bug-Report Categorization. In 38th International Conference on Software Engineering (ICSE), pp. 713–715, USA, 2016.
14. 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.
15. 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 (SAC), pp. 1123–1130, Portugal, 2013 (invited at the Journal of ACM Applied Computing Review).
16. 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), pp. 1–6, Canada, 2013.
17. M. Zibran and C. Roy. IDE-based Focused Search for Near-miss Clones. In the 27th ACM Symposium On Applied Computing (SAC), pp. 1235–1242, Italy, 2012.
18. 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), pp. 105–114, USA, 2011 (one of the seven best papers invited at a special issue of the IET Software Journal).
19. 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), pp. 151–155, Ireland, 2011.
20. M. Zibran. Analysis and Management of Code Clones. In the doctoral symposium of the 27th IEEE International Conference on Software Maintenance (ICSM), 4 pp., USA, 2011.
21. 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), pp. 266–269, Canada, 2011.
22. 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), pp. 295–304, USA, 2011.
23. 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), pp. 87–96, Romania, 2010.
24. 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), 4 pp., Canada, 2008.
25. 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), Vol. 1, pp. 215–220, Korea, 2006.
26. 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), pp. 780–785, Bangladesh, 2005.
27. 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), pp. 191–195, Bangladesh, 2002.

Refereed Workshop Contributions:

28. M. Islam and M. Zibran. On the Characteristics of Buggy Code Clones: A Code Quality Perspective. In proceedings of the 12th IEEE International Workshop on Software Clones (IWSC), pp. 1–7, Italy, 2018 (to appear).
29. 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), pp. 8–14, Japan, 2016 (winner of best paper award).

30. M. Zibran. Towards Implementation of an Integrated Clone Management Infrastructure. In 10th IEEE International Workshop on Software Clones (IWSC), pp. 60–61, Japan, 2016.
31. M. Zibran. Analysis and Visualization for Clone Refactoring. In 9th IEEE International Workshop on Software Clones (IWSC), pp. 47–48, Canada, 2015.
32. M. Zibran and C. Roy. Towards Flexible Code Clone Detection, Management and Refactoring in IDE. In 5th ACM International Workshop on Software Clones (IWSC), pp. 75–76, USA, 2011.
33. 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.
34. 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:

35. 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.
36. M. Zibran. Diagnosis and Treatment of Code Clones. In poster symposium of the 27th IEEE International Conference on Software Maintenance (ICSM), USA, 2011.
37. 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.
38. 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.
39. M. Zibran and C. Roy. Flexible Code Clone Detection and Management in IDE. In the Technology showcase in the 20th Annual Conference (CASCON), Centre for Advanced Studies Research, IBM Canada Software Laboratory, Canada, 2010.
40. M. Zibran. A Multi-phase Approach to Automated Course Timetabling. Poster session in the 2007 CMS-MITACS Joint Conference, pp. 129, Manitoba, Canada, 2007.
41. 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), Bangladesh, 2005.

Technical Reports and Other Contributions:

42. 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.
43. M. Zibran. Evaluating Test Quality, Technical Report 2012-01, pp. 1–14, Department of Computer Science, University of Saskatchewan, Canada, 2012.
44. M. Zibran. Biometric Authentication: The Security Issues, Technical Report 2012-02, pp. 1–9, Department of Computer Science, University of Saskatchewan, Canada, 2012.
45. 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.
46. 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.
47. 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

- Local Chair for the 10th EAI International Conference on Digital Forensics & Cyber Crime (ICDF2C), 2018
- Program Committee (PC) Member, International Conference on Program Comprehension (ICPC), 2012, 2018
- PC member, IEEE International Workshop on Software Clones (IWSC), 2015, 2017, 2018
- PC member, 1st International Workshop on Affective Computing for Requirements Engineering (AffectRE), 2018
- PC member, 3rd International Workshop on Emotion Awareness in Software Engineering (SEmotion), 2018
- PC Co-Chair, IEEE 10th International Workshop on Software Clones (IWSC), 2016
- PC member, International Workshop on Enterprise Web Application Dependability (EWAD), 2015, 2016
- Proceedings and Pamphlet Co-chair, 22nd IEEE Intl. Conf. on Program Comprehension (ICPC), 2014
- Web Chair, 29th IEEE International Conference on Software Maintenance (ICSM), 2013
- Web Chair, 12th IEEE International Conference on Source Code Analysis and Manipulation (SCAM), 2012
- PC Member, 19th Working Conference on Reverse Engineering (WCRE), 2012
- Web Chair, 19th IEEE International Conference on Program Comprehension (ICPC), 2011

Reviewer for Journal Publications

- Springer Journal of Empirical Software Engineering (EMSE), 2017, 2018
- Elsevier Journal of Systems and Software (JSS), 2016, 2017
- IEEE Security & Privacy, 2016
- Elsevier Journal of Information and Software Technology (IST), 2015
- Springer Software Quality Journal (SQJ), 2015

Industry Experience

- Intermediate Software Developer, SED Systems, Canada [Oct 2012–Sep 2013]
- Senior Programmer Analyst, Seventh Sense Software, Bangladesh [July 2003–Feb 2004]
- Programmer, Grameen Solutions Ltd., Bangladesh [Nov 2002–July 2003]

Trainings and Workshops

- Learning and Engagement Strategies in Software Engineering, Florida International University, USA, 2017
- Pedagogy and Course Design, Bucknell University, USA, 2014
- Fuzzy Logic Theory and Applications, 3.5 credit tutorial, IEEE North Saskatchewan Section, Canada, 2010
- Leadership Development, British High Commission and Dhaka University, Bangladesh, 2004

Teaching Experience

- **Assistant Professor**, University of New Orleans, USA. [Jan 2015–to date]
  Courses Taught:
  - Software Testing and Quality Assurance, Spring 2017, 2018
  - Software Security, Fall 2016, 2017
  - Agile Software Engineering, Fall 2015, 2016, 2017
  - Advanced Software Engineering, Spring 2016
  - Introduction to Software Engineering, Spring 2016, 2017, 2018
  - Data Structures, Spring 2015

- **Visiting Assistant Professor**, Bucknell University, USA [Aug 2014–Dec 2014]
  Courses Taught:
  - Introduction to Computer Science, Fall 2014
  - Programming Language Design, Fall 2014

- **Teaching Assistant**, University of Saskatchewan, Canada [Sep 2009–April 2012]
  Courses Taught:
  - Software Management, Winter 2010, 2012
  - Principles of Computer Science, Winter 2011
  - Developing Object-oriented Systems, Fall 2010, 2011
  - Introduction to Computer Science and Programming, Summer 2010, Winter 2012
  - Intermediate Software Engineering, Fall 2009, 2010

- **Teaching Assistant**, University of Calgary, Canada [Sep 2007–Aug 2009]
  Courses Taught:
  - Introduction to Computer Science, Fall 2007, Winter 2008

- **Visiting Faculty**, American International University, Bangladesh [May 2008–Aug 2008]
  Courses Taught:
  - Object Oriented System Analysis and Design, Summer 2008
  - Management Information Systems, Summer 2008
  - Enterprise Resource Planning, Summer 2008

- **Teaching Assistant**, University of Lethbridge, Canada [Sep 2005–Aug 2007]
  Courses Taught:
  - Introduction to Computer Science, Winter 2006, Fall 2006
  - Operating Systems, Fall 2005

- **Lecturer**, Islamic University of Technology, Bangladesh [Mar 2004–Aug 2005]
  Courses Taught:
  - 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**, Southeast University, Bangladesh [Sep 2003–Apr 2004]
  Courses Taught:
  - Object Oriented programming with Microsoft Visual C++, Winter 2004
  - Introduction to Programming with C, Fall 2003

Students Supervision and Mentoring

- Currently advising one Ph.D. student and two M.Sc. 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

- Faculty Advisor, Bangladeshi Students' Association at the University of New Orleans, USA. 2016–2017
- Coordinated 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. 2015–2017
- Elected President, Computer Science Graduate Course Council (CSGCC), Department of Computer Science, University of Saskatchewan, Canada. 2011–2012
- Elected President, Bangladeshi Students' Association at the University of Saskatchewan, Canada. 2011–2012
- Elected GSA (Graduate Students Association) Representative for the CSGCC, Department of Computer Science, University of Saskatchewan, Canada. 2010–2011

Awards

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

Professional Membership

- Professional Member, ACM Special Interest Groups on Applied Computing (SIGAPP)
- Professional Member, ACM Special Interest Group on Software Engineering (SIGSOFT)
- Professional Member, IEEE Computer Society