Minhaz F. Zibran

Associate Professor Department of Computer Science Idaho State University Pocatello, ID, USA



Current Affiliation

• Associate Professor, Department of Computer Science, Idaho State University, USA Aug	2021 – to date
Education	
Ph.D., Computer Science, University of Saskatchewan, Canada	2014
M.Sc., Computer Science, University of Lethbridge, Canada	2007
B.Sc., Computer Science & Information Technology, Islamic University of Technology, Bangladesh	2002
Grants	
• MineBug: Mining Bug-fix Patterns for Secure and Reliable Software, Louisiana Board of Regents,	Aug 2021-
Sole PI: Minhaz Zibran, \$95,070.	Aug 2023
• UNO CyberRange: An Advanced Platform for Cybersecurity Workforce Training, Louisiana Board	June 2018-
of Regents, PI: Vassil Roussev, Co-PI: Irfan Ahmed and Minhaz Zibran, \$195,400.	June 2019
• DoD Cybersecurity Scholarship Program, US Department of Defense (DoD), PI: Vassil Roussev,	Aug 2018-
Co-PI: Minhaz Zibran, \$107,574.	Jul 2019
• Automatic Detection of Emotions in Valence and Arousal Spaces in Software Engineering Text,	Feb 2018-
SCoRe (Stimulating Competitive Research) Grant, UNO ORSP (Office of Research and Sponsored Programs), Sole PI: Minhaz Zibran, \$15,000.	Jan 2019
• Automatic Identification of Malign Code Clones in Software Systems, SCoRe Grant, UNO ORSP,	July 2017-
Sole PI: Minhaz Zibran, \$15,000.	June 2018
• Exposing Bug-fix Patterns through Software Mining, CoS (College of Science) Grant, UNO Col-	Apr 2018-
lege of Science, Sole PI: Minhaz Zibran, \$15,000.	Jun 2018
• Automatic Sentiment Detection in Software Engineering Textual Artifacts, CoS Grant, UNO Col-	May 2017-
lege of Science, Sole PI: Minhaz Zibran, \$5,100.	Aug 2017

Publications

Refereed Journal Contributions:

- 1. M. Islam and M. Zibran. What Changes in Where? An Empirical Study of Bug-Fixing Change Patterns, ACM Applied Computing Review, 20 (4): 18–34, 2021.
- 2. M. Islam and M. Zibran. SentiStrength-SE: Exploiting Domain Specificity for Improved Sentiment Analysis in Software Engineering Text, Elsevier Journal of Systems and Software (JSS), 145: 125–146, 2018.
- 3. 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.
- 4. M. Zibran and C. Roy. Conflict-aware Optimal Scheduling of Code Clone Refactoring. Journal of IET Software, 7 (3): 167–186, 2013.
- 5. 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.
- 6. 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:

- 7. R. Joseph, M. Zibran, and F. Eishita. Choosing the Weapon: A Comparative Study of Security Analyzers for Android Applications. In 18th IEEE International Conference on Software Engineering, Management and Applications (SERA), 07 pages, Japan, 2021 (to appear).
- 8. D. Murphy, M. Zibran, and F. Eishita. Plugins to Detect Vulnerable Plugins: An Empirical Assessment of the Security Scanner Plugins for WordPress. In 18th IEEE International Conference on Software Engineering, Management and Applications (SERA), 06 pages, Japan, 2021 (to appear).
- 9. M. Islam and M. Zibran. How Bugs Are Fixed: Exposing Bug-fix Patterns with Edits and Nesting Levels. In 35th ACM Symposium On Applied Computing (SAC), pp. 1523–1531, Czech Republic, 2020 (invited at the ACM Applied Computing Review).
- M. Islam, M. Ahmmed and M. Zibran. MarValous: Machine Learning Based Detection of Emotions in the Valence-Arousal Space in Software Engineering Text. In 34th ACM Symposium On Applied Computing (SAC), pp. 1786– 1793, Cyprus, 2019.
- 11. J. Imseis, C. Nachuma, S. Arifuzzaman, M. Zibran, and Z. Bhuiyan. On the Assessment of Security and Performance Bugs in Chromium Open-Source Project, In 5th International Conference on Dependability in Sensor, Cloud, and Big Data Systems and Applications (DependSys), Springer Communications in Computer and Information Science, vol. 1123, pp. 145–157, 2019.
- 12. M. Islam and M. Zibran. Sentiment Analysis in Software Bug Related Commit Messages. In 27th International Conference on Software Engineering and Data Engineering (SEDE), pp. 3–8, USA, 2018 (best paper award).
- 13. D. Alawad, M. Panta, M. Zibran, and M. Islam. An Empirical Study of the Relationships between Code Readability and Software Complexity. In 27th International Conference on Software Engineering and Data Engineering (SEDE), pp. 122–127, USA, 2018.
- 14. N. Sattar, M. Faysal, M. Zibran, S. Arifuzzaman, and M. Islam. Data Mining in-IDE Activities: Why Software Developers Fail. In 27th International Conference on Software Engineering and Data Engineering (SEDE), pp. 97–102, USA, 2018.
- 15. 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. 487–491, Italy, 2018.
- 16. 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. 1536–1543, France, 2018.
- 17. 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.
- 18. 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.
- 19. 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.
- 20. 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.
- 21. 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).
- 22. 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.
- 23. 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.

- 24. 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 ACM Applied Computing Review).
- 25. 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.
- 26. 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.
- 27. 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 (invited at the IET Software Journal).
- 28. 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.
- 29. 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.
- 30. 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.
- 31. 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.
- 32. 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.
- 33. 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.
- 34. 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.
- 35. 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.
- 36. 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:

- 37. N. Sattar, S. Arifuzzaman, M. Zibran, and M. Sakib. Detecting Web Spams in Webgraphs with Predictive Model Analysis. In the 3rd International Workshop on Big Data Analytic for Cybercrime Investigation and Prevention, pp. 4299–4308, USA, 2019.
- 38. 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. 23–29, Italy, 2018.
- 39. 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 (best paper award).
- 40. M. Zibran. Towards Implementation of an Integrated Clone Management Infrastructure. In 10th IEEE International Workshop on Software Clones (IWSC), pp. 60–61, Japan, 2016.

- 41. M. Zibran. Analysis and Visualization for Clone Refactoring. In 9th IEEE International Workshop on Software Clones (IWSC), pp. 47–48, Canada, 2015.
- 42. 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.
- 43. 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.
- 44. 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:

- 45. M. Islam and M. Zibran. Entity Based Aspect-Oriented Opinion Mining in Software Engineering. InnovateUNO, The University of New Orleans, USA, 2019.
- 46. M. Islam and M. Zibran. An Empirical Study of Security Vulnerabilities in Software Systems. In 10th EAI International Conference on Digital Forensics & Cyber Crime (ICDF2C 2018), USA, 2018.
- 47. M. Islam and M. Zibran. Understanding Bug Fix Patterns: Towards an Improved Automated Program Repair Method. InnovateUNO, The University of New Orleans, USA, 2018.
- 48. 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.
- 49. M. Zibran. Diagnosis and Treatment of Code Clones. In poster symposium of the 27th IEEE International Conference on Software Maintenance (ICSM), USA, 2011.
- 50. 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.
- 51. 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.
- 52. 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.
- 53. M. Zibran. A Multi-phase Approach to Automated Course Timetabling. Poster session in the 2007 CMS-MITACS Joint Conference, pp. 129, Manitoba, Canada, 2007.
- 54. 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:

- 55. 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.
- 56. M. Zibran. Evaluating Test Quality, Technical Report 2012-01, pp. 1–14, Department of Computer Science, University of Saskatchewan, Canada, 2012.
- 57. M. Zibran. Biometric Authentication: The Security Issues, Technical Report 2012-02, pp. 1–9, Department of Computer Science, University of Saskatchewan, Canada, 2012.
- 58. 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.
- 59. 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.

Invited Talks and Presentations

- 1. Software Systems: Friend or Foe? Invited lecture at the Spring 2017 Honors Seminar (A&S 2999), University of New Orleans, USA, February 2017.
- 2. Clone Management: Detection and Scheduling for Refactoring. University of New Orleans, USA, November 2014.
- 3. Detection and Analysis of Code Clones from Management Perspective. Bucknell University, USA, April 2014.
- 4. Analysis and Management of Code Clones. University College London (UCL), UK, October 2012.
- 5. 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. 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. Design Patterns: 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. Automated University Course Timetabling. Presentation in front of the administrative staff at the University of Lethbridge, Canada, 2007.
- 9. 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

i diessional Sel vices	
• Program Committee (PC) member, IEEE/ACM Intl. Conf. on Mining Software Repositories (MSR).	, 2020, 2021
• PC member, IEEE International Workshop on Software Clones (IWSC), 2015, 201	7, 2018, 2019
• PC member, Intl. Workshop on Emotion Awareness in Software Engineering (SEmotion), 201	8, 2019, 2020
 Member, Proposal Review Panel, National Science Foundation (NSF), 	2018
• Local Chair for the 10th EAI International Conference on Digital Forensics & Cyber Crime (ICDF20	C), 2018
• PC Member, International Conference on Program Comprehension (ICPC),	2012, 2018
• PC member, 1st International Workshop on Affective Computing for Requirements Engineering (Affective Computing for Requirements)	fectRE), 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),

• PC Member, 19th Working Conference on Reverse Engineering (WCRE),

• Web Chair, 19th IEEE International Conference on Program Comprehension (ICPC),

Reviewer for Journal Publications

cviewer for Journal Lubileations	
ACM Transaction on Software Engineering and Methodology (TOSEM),	2020
• IEEE Software,	2019
 Elsevier Journal of Systems and Software (JSS), 	2016, 2017, 2019
 Springer Journal of Empirical Software Engineering (EMSE), 	2017, 2018
• IEEE Security & Privacy,	2016
 Elsevier Journal of Information and Software Technology (IST), 	2015
 Springer Software Quality Journal (SQJ), 	2015

Adr

Iministrative Services at UNO	
• Graduate Coordinator, Department of Computer Science,	2019 - 2021
• Chair, Graduate Studies Committee, Department of Computer Science,	2019 - 2021
• Member, UNO Cyber Center,	2017 - 2021
• Organizer, Departmental Weekly Seminars, Department of Computer Science,	2018 - 2019
• Member, Graduate Grade Appeal Committee, Department of Computer Science,	2016 - 2018

2012

2012

2011

Manakan Hada		2017 2019
 Coordinated the 	rgraduate Grade Appeal Committee, Department of Computer Science, e Software Engineering Apprenticeship Program (SWEAP), which facilitates for internships in software industry	
Industry Experience		
 Senior Program 	oftware Developer, SED Systems, Canada umer Analyst, Seventh Sense Software, Bangladesh rameen Solutions Ltd., Bangladesh	[Oct 2012–Sep 2013] [July 2003–Feb 2004] [Nov 2002–July 2003]
Professional Training	gs and Workshops	
 the Power of Jin SEED 2018 Sun Learning and E Pedagogy and C Fuzzy Logic Th 	ing on JIRA (Day-1: Getting More from Jira Software Server, Day-2: Ita Reporting & Dashboards), University of New Orleans, USA, mmer Workshop on Hands-on Labs for Security Education, Syracuse Ungagement Strategies in Software Engineering, Florida International University, USA, neory and Applications, 3.5 credit tutorial, IEEE North Saskatchewan Stelopment, British High Commission and Dhaka University, Banglades	2019 University, USA, 2018 University, USA, 2017 2014 Section, Canada, 2010
Teaching Experience		51 2000 7 20017
• Associate Professo Courses Taught:	 r, University of New Orleans, USA. Agile Software Engnieering, Spring 2021 Introduction to Software Engineering, Spring 2021 Software Security, Fall 2020 Data Models and Database Systems, Fall 2020 	[Aug 2020–June 2021]
• Assistant Professor Courses Taught:	r, University of New Orleans, USA. - Software Security, Fall 2016–2019 - Data Models and Database Systems, Spring 2020 - Software Testing and Quality Assurance, Spring 2017–2019 - Topics in Advanced Computer Science, Fall 2019 - Agile Software Engineering, Fall 2015–2019 - Advanced Software Engineering, Spring 2016 - Introduction to Software Engineering, Spring 2016–2020 - Data Structures, Spring 2015	[Jan 2015–Aug 2020]
• Visiting Assistant Courses Taught:	 Professor, Bucknell University, USA Introduction to Computer Science, Fall 2014 Programming Language Design, Fall 2014 	[Aug 2014–Dec 2014]
• Teaching Assistant Courses Taught:	t, University of Saskatchewan, Canada - 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 20 - Intermediate Software Engineering, Fall 2009, 2010	[Sep 2009–April 2012]
• Teaching Assistant Courses Taught:	t, University of Calgary, Canada – Introduction to Computer Science, Fall 2007, Winter 2008	[Sep 2007–Aug 2009]
• Visiting Faculty, A Courses Taught:	 American International University, Bangladesh Object Oriented System Analysis and Design, Summer 2008 Management Information Systems, Summer 2008 Enterprise Resource Planning, Summer 2008 	[May 2008–Aug 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]

Aug 2015-Apr 2020

Courses Taught:

- Object Oriented programming with Microsoft Visual C++, Winter 2004
- Introduction to Programming with C, Fall 2003

Students Advising and Mentoring

Md Rakibul Islam, PhD Student, University of New Orleans,
 (now an Assistant Professor of Computer Science at the University of Wisconsin – Eau Claire).
 Under my mentorship, he won the following awards:

- Two best paper awards
- Three conference papers invited at journals
- Completer Award at UNO, 2020
- Privateer Choice Best Poster Award, InnovateUNO 2019
- One of the best five posters at the InnovateUNO 2017
- Four NSF/ACM travel awards for attending conferences
- Md. Kauser Ahmmed, MS Student, University of New Orleans,

Aug 2018–May 2019

• Reecha Khanal, Undergrad Student, University of New Orleans,

Jan 2017-Apr 2017

Under my mentorship, she won the Privateer Choice Award at the 2017 InnovateUNO event.

• Lindsey Ann Dale, MS Student, University of New Orleans,

Aug 2016–Dec 2016

• Saroj Duwal, Undergraduate Student, University of New Orleans,

Aug 2017-May 2018

• Pradeep Jakibanjar, Undergraduate Student, University of New Orleans,

Jan 2015-May 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.
- Supervised undergrad thesis, "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.

Thesis Committee Services at UNO

- The Kati Module System: Modular Design for Delivering Character Focused Dialogue in Games, MS thesis, 2021.
- Analysis of Human Affect and Bug Patterns to Improve Software Quality and Security, PhD thesis, 2020.
- Performance Modeling and Analysis of Algorithms on Parallel Computing Systems, MS thesis, 2020.
- Detecting Acoustic Properties of Model Outputs Using Machine Learning, MS thesis, 2020.
- Ship Detection Feature Analysis in Optical Satellite Imagery through Machine Learning Applications, MS thesis, 2020.
- Accelerating Information Theoretic Approach of Community Detection Using Distributed and Hybrid Memory Parallel Schemes, MS thesis, 2020.
- Classification of Prostate Cancer Patients into Indolent and Aggressive Using Machine Learning, MS thesis, 2020.
- A Scientific Approach for High Performance Digital Forensics, PhD thesis, 2019.

- Distributed Community Detection in Large Networks using An Information-Theoretic Approach, MS thesis, 2019.
- Prediction of Hierarchical Classification of Transposable Elements Using ML Techniques, MS thesis, 2019.
- Detection of Sand Boils from Images using Machine Learning Approaches, MS thesis, 2019.
- Semantic-aware Stealthy Control Logic Infection Attack, MS thesis, 2018.
- Remote Monitoring of Cherry Wetness Using a Leaf Wetness Sensor and Wireless Sensor Network, MS thesis, 2018.
- MAnanA: A Heuristic Scoring Framework for Analysis of Concept Maps in Cybersecurity Education, MS thesis, 2018.
- Assessment of Pedagogical Tools for Cybersecurity Education, MS thesis, 2018.
- Automatic Forensic Analysis of Digital Artifacts from PCCC Network Traffic Log, MS thesis, 2017.
- Survey of Autonomic Computing and Experiments on JMX-based Autonomic Features, MS thesis, 2016.

Community Services

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

Awards	
• Best Paper Award at the 27th Intl. Conf. on Software Engineering and Data Eng. (SEDE), USA.	2018
• Advisor of the Year Nominee (Student Leadership Recognition Award) 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), Japan.	2017
• NSF ICSE Travel Award (\$2,367), 38th Intl. Conference on Software Engineering (ICSE), USA.	2016
• 2nd Best Poster Award (\$100), Poster Symposium of CSER Spring meeting in Edmonton, Canada.	2014
• Walter C. Sumner Memorial Fellowship (\$12,000), Canada.	2013, 2012
• ACM SIGAPP Student Travel Award (\$3,000), Canada.	2013, 2012
• The President's Office Student Travel Award (\$500), University of Saskatchewan, Canada.	2013
• College of Grad Studies and Research Travel Award (\$1,100), Uni. of Saskatchewan, Canada.	2012, 2011
• Department of Computer Science Ph.D. Scholarship (\$20,000), University of Saskatchewan, Canada.	2011
• NSERC Post Graduate Scholarship - doctoral level (\$42,000), Canada.	2009
• Province of Alberta International Student Projects Award (\$550), Canada.	2007
• Travel Grant (\$550), Graduate School, University of Lethbridge, Canada.	2007
• 8th position in 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

Citizenship and Immigration Status

- Permanent resident in the United States.
- Canadian citizen.