

Tanmay Bhowmik, Ph.D.

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EMPLOYMENT	Assistant Professor (tenure-track) Department of Computer Science and Engineering Mississippi State University, USA	Fall 2016- Present
	Assistant Professor of Computer Science (tenure-track) School of Computer Science and Information Systems Northwest Missouri State University, USA	Fall 2015- Summer 2016
	Postdoctoral Research Fellow National Strategic Planning and Analysis Research Center (nSPARC) Mississippi State University, USA	Summer 2015
EDUCATION	Mississippi State University, USA Ph.D., Computer Science Dissertation Title: Stakeholders' Social Interaction in Requirements Engineering of Open Source Software Dissertation Director: Dr. Nan Niu GPA: 4.0 out of 4.0	May 2015
	M.S., Computer Science GPA: 4.0 out of 4.0	2010
	National Institute of Technology, Durgapur, India B.Tech., Computer Science and Engineering GPA: 8.05 out of 10.00 (<i>First Class with Distinction</i>)	2007
HONORS AND AWARDS	1. Distinguished Graduate Scholar , Mississippi State University Bestowed upon only one graduate student in the college of engineering each Spring and Fall for excellence in research and publication.	2015
	2. Teaching Assistant of the Year , Mississippi State University Bestowed upon one Ph.D. and one M.S. student in the university each year for excellence in teaching.	2015
	3. Spirit of State , Mississippi State University Bestowed upon students who demonstrate an exceptional personal commitment to enhancing Mississippi State University campus life.	2015
	4. Graduate Student Publication Award , Mississippi State University	2015
	5. Information Assurance Certificate , Mississippi State University	2015
	6. Graduate Student Publication Award , Mississippi State University	2013
	7. Best Research Presentation , Empirical Software Engineering Research Group, Mississippi State University	2012
	8. Graduate Student of the Month , Dept. of CSE Mississippi State University	April 2010

9. **Selected to Phi Kappa Phi Honor Society** 2009
Mississippi State University
10. **Full Scholarship** for the Four Year B.Tech. Program in CSE 2003-2007
Government of India

**PEER-RE-
VIEWED PUBLI-
CATIONS**

Book Chapter

- [B1] **Tanmay Bhowmik**, Vander Alves, and Nan Niu. “An Exploratory Case Study on Exploiting Aspect Orientation in Mobile Game Porting.” In *Integration of Reusable Systems* (Thouraya Bouabana-Tebibel and Stuart H. Rubin eds.), Advances in Intelligent Systems and Computing, Volume: 263, Springer, 2014, pp. 241-261. 2014

Referred Journal Papers

- [J8] **Tanmay Bhowmik** and *Anh Quoc Do*¹. “Refinement and Resolution of Just-in-Time Requirements in Open Source Software and a Closer Look into Non-Functional Requirements.” *Journal of Industrial Information Integration*. 2018 2018
- [J7] Sandeep Reddivari, **Tanmay Bhowmik**, and *Corey Hollis*. “Automated Support to Capture Verbal Just-in-Time Requirements via Audio Mining and Cluster-based Visualization,” *Journal of Industrial Information Integration*. 2018 2018
- [J6] Kazi Zakia Sultana, Byron Williams, and **Tanmay Bhowmik**. “A study examining relationships between micro patterns and security vulnerabilities.” *Software Quality Journal*, 2017, pp. 1-37. 2017
- [J5] **Tanmay Bhowmik**, Nan Niu, Prachi Singhanian, and Wen Tao. “On the Role of Structural Holes in Requirements Identification: An Exploratory Study on Open Source Software Development.” *ACM Transactions on Management Information Systems*, vol. 6, no. 3, 2015, Article No. 10. 2015
- [J4] **Tanmay Bhowmik**, Nan Niu, Juha Savolainen, and Anas Mahmoud. “Leveraging Topic Modeling and Part-of-Speech Tagging to Support Combinational Creativity in Requirements Engineering.” *Requirements Engineering Journal (REJ)*, vol. 20, no, 3, 2015, pp. 253-280. 2015
- [J3] **Tanmay Bhowmik**, Nan Niu, Wentao Wang, Jing-Ru C Cheng, Ling Li, and Xiongfei Cao. “Optimal Group Size for Software Change Tasks: A Social Information Foraging Perspective.” *IEEE Transactions on Cybernetics*, vol. PP, no. 99, 2015, pp. 1-12. 2015
- [J2] Sandeep Reddivari, Shirin Rad, **Tanmay Bhowmik**, Nisreen Cain and Nan Niu. “Visual Requirements Analytics: A Framework and Case Study”, *Requirements Engineering Journal (REJ)*, Volume: 19, Issue: 3, 2014, pp. 257-279. 2014
- [J1] Harun Pirim, Dilip Gautam, **Tanmay Bhowmik**, Andy D. Perkins, Burak Eksioglu, and Ahmet Alkan. “Performance of an Ensemble 2011

¹ Author names in italic fonts in publication indicate my student.

Clustering Algorithm on Biological Data Sets.” *Mathematical and Computational Applications*, Volume: 16, Issue: 1, 2011, pp. 87-96.

Submitted Journal Papers

- [SJ1] *Anh Quoc Do*, **Tanmay Bhowmik**, and Gary L. Bradshaw. “Capturing Creative Requirements via Requirements Reuse: A Machine Learning-Based Approach.” *Journal of Systems and Software (JSS)*. 2019

PEER-RE- VIEWED PUBLI- CATIONS

Refereed Conference Papers

- [C14] **Tanmay Bhowmik**, *Surendra Raju Chekuri*, *Anh Quoc Do*, Wentao Wang, and Nan Niu, “The Role of Environment Assertions in Requirements-Based Testing,” the 27th IEEE International Requirements Engineering Conference (RE’19), Jeju Island, South Korea, Sep. 23-27, 2019. 2019
- [C13] *Anh Quoc Do*, *Surendra Raju Chekuri*, and **Tanmay Bhowmik**, “Automated Support to Capture Creative Requirements via Requirements Reuse,” the 18th International Conference on Software and Systems Reuse (ICSR’19), Cincinnati, OH, June 26-28, 2019, pp. 47-63. **An extension has been invited to the “Journal of Systems and Software” (cf. [J4]).** 2019
- [C12] *Sayem Mohammad Imtiaz* and **Tanmay Bhowmik**. “Towards Data-Driven Vulnerability Prediction for Requirements.” The 26th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE), Lake Buena Vista, Florida, 2018, pp. 744-748. (Acceptance rate: ~24%) 2018
- [C11] Sandeep Reddivari and **Tanmay Bhowmik**. “A Qualitative Investigation of Landmarks in Software Code Navigation.” In ACM 2nd International Conference on Compute and Data Analysis (ICCD), Illinois, USA, 2018, pp. 80-84. 2018
- [C10] **Tanmay Bhowmik**. “Stakeholders’ Social Interaction in Requirements Engineering of Open Source Software.” Doctoral Symposium at the 22nd IEEE International Requirements Engineering Conference (RE 2014), Karlskrona, Sweden, August 25, 2014, pp. 467-472. 2014
- [C9] **Tanmay Bhowmik**, Nan Niu, Anas Mahmoud, and Juha Savolainen. “Automated Support for Combinational Creativity in Requirements Engineering.” 22nd IEEE International Requirements Engineering Conference (RE 2014), Karlskrona, Sweden, August 25-29, 2014, pp. 243-252. **An extension has been invited to the “Requirements Engineering Journal” (cf. [J4]).** Acceptance rate: 27% (31 out of 115). 2014
- [C8] Nan Niu, **Tanmay Bhowmik**, Hui Liu, and Zhendong Niu. “Traceability-Enabled Refactoring for Managing Just-In-Time Requirements.” 22nd IEEE International Requirements Engineering Conference (RE 2014), Karlskrona, Sweden, August 25-29, 2014, pp. 133-142. Acceptance rate: 27% (31 out of 115). 2014
- [C7] **Tanmay Bhowmik**, Nan Niu, and Donna Reese. “Students vs. Professionals in Assisted Requirements Tracing: How Could We Train 2014

Our Students?” 121st ASEE Annual Conference and Exposition, Indianapolis, IN, USA, June 15-18, 2014.

- [C6] **Tanmay Bhowmik**, Vander Alves, and Nan Niu. “Porting Mobile Games in an Aspect-Oriented Way: An Industrial Case Study.” 14th IEEE International Conference on Information Reuse and Integration (IRI 2013), San Francisco, CA, USA, August 14-16, 2013, pp. 458-465. **Selected as a *best paper* and published in the book “Advances in Intelligent and Soft Computing” (cf. [B1]).** Acceptance rate: 26%. 2013
- [C5] Nan Niu, Juha Savolainen, **Tanmay Bhowmik**, Anas Mahmoud, and Sandeep Reddivari. “A Framework for Examining Topical Locality in Object-Oriented Software.” 36th IEEE Computer Software and Applications Conference (COMPSAC 2012), Izmir, Turkey, July 2012, pp. 219-224. Acceptance rate: 30% (72 out of 237). 2012
- [C4] Nan Niu, Vander Alves, and **Tanmay Bhowmik**. “Portability as an Aspect: Rethinking Modularity in Mobile Game Development.” 10th International Conference on Aspect-Oriented Software Development (AOSD 2011), Porto de Galinhas, Pernambuco, Brazil, March 2011, pp. 3-4. 2011
- [C3] Harun Pirim, Dilip Gautam, **Tanmay Bhowmik**, Andy Perkins, and Burak Eksioglu. “Performance evaluation of a community structure finding algorithm using modularity and C-rand measures.” IEEE International Joint Conference on Neural Networks, Barcelona, Spain, July 2010, pp. 1-8. 2010
- [C2] Harun Pirim, Dilip Gautam, **Tanmay Bhowmik**, Andy D. Perkins, Burak Eksioglu, and Ahmet Alkan. “Performance of an Ensemble Clustering Algorithm on Biological Data Sets.” International Symposium on Computing in Science and Engineering, Kusadasi, Turkey, June 2010, pp. 723-731. 2010
- [C1] **Tanmay Bhowmik**, Nan Niu, and Edward Allen. “Modular Development and Verification of Domain Requirements via Model Checking.” 48th ACM Southeast Conference (ACMSE 2010), Oxford, Mississippi, USA, April 2010, Article No. 58. 2010

**PEER-RE-
VIEWED PUBLI-
CATIONS**

Refereed Workshop Paper

- [W5] *Anh Quoc Do* and **Tanmay Bhowmik**. “Automated Generation of Creative Software Requirements: A Data-Driven Approach.” In The 26th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE) Workshops, Lake Buena Vista, Florida, 2018, pp. 9-12. 2018
- [W4] *Anh Quoc Do* and **Tanmay Bhowmik**. “Refinement and Resolution of Just-in-Time Requirements in Open Source Software: A Case Study.” In IEEE 25th International Requirements Engineering Conference Workshops (REW), Lisbon, Portugal, 2017, pp. 407-410. 2017
- [W3] *Corey Hollis* and **Tanmay Bhowmik**. “Automated Support to Capture Verbal Just-in-Time Requirements in Agile Development: A 2017

Practitioner View.” In IEEE 25th International Requirements Engineering Conference Workshops (REW), Lisbon, Portugal, 2017, pp. 419-422.

[W2] **Tanmay Bhowmik** and Sandeep Reddivari. “Resolution Trend of Just-in-Time Requirements in Open Source Software Development.” 1st International Workshop on Just-In-Time RE (JIT RE 2015), in affiliation with the 23rd IEEE International Requirements Engineering Conference (RE 2015), Ottawa, Canada, Aug 25, 2015, (in press). 2015

[W1] Nan Niu, Sandeep Reddivari, Anas Mahmoud, **Tanmay Bhowmik**, and Songhua Xu. “Automatic Labeling of Software Requirements Clusters.” 4th International Workshop on Search-Driven Development: Users, Infrastructure, Tools, and Evaluation (SUITE 2012), in affiliation with the 34rd International Conference on Software Engineering (ICSE 2012), Zurich, Switzerland, June 5, 2012, pp. 17-20. Acceptance rate: 20%. 2012

**RESEARCH
PROPOSAL
WRITING AND
GRANTS**

1. Submitted two research proposals, one as the PI and one as a Co-PI, for the Theoretical and Applied Research Grant at Northwest Missouri State University (**Awarded one, \$1,500**). 2015-2016

2. **Awarded: Tanmay Bhowmik (PI)** and Gary Bradshaw, “A Framework to Evaluate Creativity in Requirements Engineering”, Cross-College Research Program, Office of Research and Economic Development, Mississippi State University, **\$4,000** 2016-2018

3. **Submitted: Tanmay Bhowmik (PI)**, “CRII: III: Leveraging Data Mining to Automate Discovery of Creative Requirements,” U.S. National Science Foundation (NSF), \$174,990. 2017

4. **Submitted: T. Bhowmik (PI)**, “SaTC: Core: Small: Towards Data-Driven Domain Analysis for Security Requirements,” U.S. National Science Foundation (NSF), \$499,955. 2017

5. **Awarded: Tanmay Bhowmik (PI)**, “Towards Data-Driven Environment Assertions for Security Requirements”, Office of Research and Economic Development (ORED) Undergraduate Research Program, Mississippi State University, **\$4,000** 2018-2020

6. **Submitted: T. Bhowmik (PI)**, “**CAREER**: Data-Driven Approach to Automate Discovery of Creative Requirements,” U.S. National Science Foundation (NSF), \$566,915. 2019

7. **Submitted: T. Bhowmik (PI)**, “SaTC: Core: Small: Data-Driven Vulnerability Prediction for Software Requirements,” U.S. National Science Foundation (NSF), \$498,891. 2019

8. **In preparation: Shaowei Wang (PI) and Tanmay Bhowmik (Co-PI)**, “SHF: Small: Enhance the Quality of API Code Examples on Knowledge Sharing Platforms for Effective Reuse,” U.S. National Science Foundation (NSF), \$499,706. (**Will be submitted on by Nov. 14, 2019**) 2019

TECHNICAL PRESENTATIONS

1. **Refereed:** “The Role of Environment Assertions in Requirements-Based Testing,” the 27th IEEE International Requirements Engineering Conference (RE’19), Jeju Island, South Korea, 2019. 2019
2. **Refereed:** “Automated Support to Capture Creative Requirements via Requirements Reuse,” the 18th International Conference on Software and Systems Reuse (ICSR’19), Cincinnati, OH, 2019. 2019
3. **Refereed:** “Towards Data-Driven Vulnerability Prediction for Requirements.” The 26th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE), Lake Buena Vista, Florida, 2018. 2018
4. **Refereed:** “Automated Generation of Creative Software Requirements: A Data-Driven Approach.” In The 26th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE) Workshops, Lake Buena Vista, Florida, 2018. 2018
5. **Refereed:** “Refinement and Resolution of Just-in-Time Requirements in Open Source Software: A Case Study.” In IEEE 25th International Requirements Engineering Conference Workshops (REW), Lisbon, Portugal, 2017. 2017
6. **Refereed:** Automated Support to Capture Verbal Just-in-Time Requirements in Agile Development: A Practitioner View.” In IEEE 25th International Requirements Engineering Conference Workshops (REW), Lisbon, Portugal, 2017. 2017
7. **Invited:** “Stakeholders’ Social Interaction in Requirements Engineering of Open Source Software,” Department of Computer Science and Engineering, Mississippi State University, April 22, 2016. 2016
8. **Invited:** “Stakeholders’ Social Interaction in Requirements Engineering of Open Source Software,” Computer Science Seminar, University of Texas at El Paso, January 19, 2016. 2016
9. **Invited:** “Stakeholders’ Social Interaction in Requirements Engineering of Open Source Software,” Department of Computer Science’s Colloquium Series, University of Alabama February 3, 2015. 2015
10. **Refereed:** “Stakeholders’ Social Interaction in Requirements Engineering of Open Source Software,” Doctoral Symposium at the 22nd IEEE International Requirements Engineering Conference (RE 2014), Karlskrona, Sweden, August 25, 2014. 2014
11. **Refereed:** “Automated Support for Combinational Creativity in Requirements Engineering,” 22nd IEEE International Requirements Engineering Conference (RE 2014), Karlskrona, Sweden, August 25-29, 2014. 2014
12. **Refereed:** “Students vs. Professionals in Assisted Requirements Tracing: How Could We Train Our Students?” 121st ASEE Annual Conference and Exposition, Indianapolis, IN, USA, June 15-18, 2014. 2014

13. **Invited:** “Creativity in Requirements Engineering,” Research Presentation to the Advisory Board of the Department of Computer Science and Engineering, Mississippi State University. 2014
14. **Refereed:** “Porting Mobile Games in an Aspect-Oriented Way: An Industrial Case Study,” 14th IEEE International Conference on Information Reuse and Integration (IRI 2013), San Francisco, CA, USA, August 14-18, 2013. 2013
15. **Refereed:** “Modular Development and Verification of Domain Requirements via Model Checking,” 48th ACM Southeast Conference (ACMSE 2010), Oxford, Mississippi, USA, April 2010, Article No. 58. 2010
16. **Volunteered:** Research Presentation in Every Semester, Empirical Software Engineering Research Group, Mississippi State University. 2009-Present

TRAINING ON TEACHING AND LEARNING **Preparing Future Faculty Program** 2012-2013
 Graduate School and Center for Teaching and Learning
 Mississippi State University

- Successfully completed the year-long program followed by a three credit hour course.
- From the whole university, about twenty Ph.D. students are selected for the program through a competitive selection process.
- Learned methods for teaching, learning, research, and service.
- More information is available on: <https://www.ctl.msstate.edu/programsandservices/preparingfuturefaculty/>

TEACHING EXPERIENCE **Assistant Professor** (tenure-track) Fall 2016-Present
 Department of Computer Science and Engineering
 Mississippi State University, USA

Course	Semester	Class Size	Official Evaluation
CSE 2813 Discrete Structures	Fall 2018	55	4.5
CSE 8283 Empirical Software Eng.	Fall 2018	6	4.9
	Fall 2019	16	--
CSE 8273 Software Reqs. Eng.	Spring 2018	16	4.6
CSE 4214/6214 Intro to SE	Fall 2017	30	4.5
	Spring 2017	35	4.4
	Fall 2016	27	4.5
CSE 4283/6283 SW Testing & QA	Spring 2019	30	4.3
CSE 4233/6233 SW Architecture	Fall 2019	45	--

Average official evaluation for CSE 4214/6214 for other instructors is 4.1

Assistant Professor (tenure-track) Fall 2015-Summer 2016
 Department of Mathematics, Computer Science and Information Systems
 Northwest Missouri State University, USA

Course	Semester	Class Size	Official Evaluation ²
CSIS 596 Grad Direct. Project I	Summer 2016 (2 sections)	29 each	--
CSIS 562 Software Eng. II	Spring 2016	18	--
CSIS 542 OOP in Java	Spring 2016	22	--
CSIS 563 Dev Web App & Serv	Spring 2016 (2 sections)	30 each	--
	Fall 2015 (3 sections)	40 each	--
CSIS 525 Th & Imp of Prog Lang	Fall 2015	47	--

Instructor-of-Record

2014-2015

Department of Computer Science and Engineering
Mississippi State University

Course	Semester	Class Size	Official Evaluation
CSE 2813 Discrete Structures	Spring 2015	31	4.7
	Fall 2014	54	4.8

Average official evaluation in this course for other instructors is 4.1

Responsibilities: Teaching the courses with 100% responsibility.

- Redesigned the course based on:
 - Training received during the “Preparing Future Faculty” program at Mississippi State University.
 - A combination of the teaching and learning principles explored by Ambrose et al. (2010), and by Newcomb and colleagues (2004).
 - The recommendations offered in “Educating the Engineer of 2020 – Adapting Engineering Education to the New Century”, published by the National Academy of Engineering.
- A detailed Syllabus and Course Calendar is available on my website: <http://web.cse.msstate.edu/~tbhowmik/teaching.htm>

Teaching Assistant

2009-2010

Department of Computer Science and Engineering
Mississippi State University

Course	Semester	Class Size
CSE 6833 Intro to Algorithms	Fall 2010	28
	Fall 2009	26
CSE 2383 - Data Structure	Fall 2010	27
CSE 3813 Intro to Formal Lang & Automata	Fall 2009	29
	Spring 2009	33
CSE 6613 Intro to Biocomputing	Fall 2009	25
CSE 6733 Intro to Operating Systems	Spring 2009	28

² Never received any evaluation from Northwest Missouri State University.

- Taught class as a guest instructor.
- Collaborated on quiz and exam development with the instructor.
- Graded all written works, including final exam papers and assignments.
- Met students at a regular basis to help them with course works.

- Software Requirements Engineering
- Discrete Structures
- Software Modeling and Design
- Software Testing and Quality Assurance
- Software Architecture
- Software Engineering

2016-
Present

- Conducting research on three areas in requirements engineering (RE): creativity in RE, RE for secure software engineering, and inferences made by stakeholders in RE
- Writing proposals
- Guiding Ph.D. Dissertation and Master's Thesis

Summer
2015

Activities:

- Analyzing legacy systems with different government agencies and eliciting requirements for the new software system
- Developing software requirement specification for the new software system

2012-2014

- Collecting data relevant to education, workforce, and economic development in the state of Mississippi from different government agencies.
- Analyzing data and creating a reporting system to help answer critical policy questions in relevant areas.

2011-2012

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Mississippi State University

Supervisor: Nan Niu

Project: US National Science Foundation (NSF), SHF: EAGER: “Clustering Programming Artifacts to Enrich Code Foraging Environment” (PI: Nan Niu)⁴

Activities:

- Developing an experimental framework to assess topical locality in software.
- Looking at software maintenance from the perspective of information foraging, and creating new set of metrics to guide profitable code foraging.
- Comparing well-established source-code clustering algorithms to discover effective enrichment mechanisms for code foraging.

Project: US Department of Homeland Security (DHS), SERRI: Real-Time Identification and Monitoring of Barge-Carried Hazardous Commodities (PI: Mingzhou Jin, Co-PI: Nan Niu)

Activities:

- Collecting routing data for barge-carried hazardous commodities.
- Analyzing data to create a prediction module that facilitates real-time identification and monitoring of such commodities.
- Creating a software system that implements the prediction module and provides such identification and monitoring facilities.

**RESEARCH
EXPERIENCE**

Research Assistant

2010

Department of Computer Science and Engineering

Mississippi State University

Supervisor: Andy Perkins

Project: Improved Computational Tools for Next-Generation Sequence Data Processing and Analysis

Activities:

- Developing algorithms and techniques to improve DNA sequence data processing.
- Integrating those algorithms, techniques, and existing tools to facilitate DNA sequence data processing and analysis in an improved manner.

**RESEARCH
INTERESTS**

- Creativity in Requirements Engineering
- Requirements Engineering and Software Security
- Social Aspects in Software Engineering
- Software Engineering Education

2009-
Present

**SERVICE
ACTIVITIES**

Program Committee

1. **Invited:** 28th IEEE International Requirements Engineering Conference (RE’20), Zurich, Switzerland, Aug 31 – Sep 4, 2020.

2020

2. **Invited:** Artifacts Evaluation Track at the 42nd International Conference on Software Engineering (ICSE’20), Seoul, South Korea, May. 23-29, 2020.

2020

⁴ http://www.nsf.gov/awardsearch/showAward?AWD_ID=1238336

3. **Invited:** 18th International Conference on Software and Systems Reuse (ICSR'19), Cincinnati, OH, USA, June 26-28, 2019. 2019
4. **Invited:** RE@Next! Track at the 27th IEEE International Requirements Engineering Conference (RE'19), Jeju Island, South Korea, Sep. 23-27, 2019. 2019
5. **Invited:** Artifacts Evaluation Track at the 27th IEEE International Requirements Engineering Conference (RE'19), Jeju Island, South Korea, Sep. 23-27, 2019. 2019
6. **Invited:** RE@Next! Track at the 26th IEEE International Requirements Engineering Conference, Banff, Alberta, Canada, 2018. 2018
7. **Invited:** 2nd International Workshop on Just-In-Time RE (JIT RE 2017), in affiliation with the 25rd IEEE International Requirements Engineering Conference (RE 2017), Lisbon, Portugal, Sep 05, 2017. 2017
8. **Invited:** 1st International Workshop on Just-In-Time RE (JIT RE 2015), in affiliation with the 23rd IEEE International Requirements Engineering Conference (RE 2015), Ottawa, Canada, Aug 25, 2015. 2015

Professional Reviewing

1. **Invited:** Software Quality Journal, Springer (Impact Factor 1.596). 2018
2. **Volunteered:** Requirements Engineering Journal (REJ), Springer (Impact factor: 1.105) 2017-Present
3. **Invited:** Journal of Industrial Information Integration, Elsevier 2017
4. **Invited:** PLOS One Journal 2017
5. **Invited:** ASEE Southeastern Section Conference, Daytona Beach, Florida, March 4-6, 2018 2017
6. **Refereed:** Information and Software Technology Journal (Elsevier). 2013-2014
7. **Invited:** Journal of Systems and Software (JSS), Elsevier (Impact Factor 2.444) 2010-Present

Conference Organizing Committee

1. **Invited Proceedings Chair**, 18th International Conference on Software and Systems Reuse (ICSR), Cincinnati, OH, USA, 2019. 2018-19

Department/University Service

1. **Volunteered** Member, Faculty Search Committee, Dept. of Computer Science and Engineering 2018-Present
2. **Volunteered** Judge, MSU graduate teaching assistant microteaching exam 2018-Present
3. **Invited** Search Committee Member, National Strategic Planning and Analysis Research Center (nSPARC), Mississippi State University 2017-Present
4. **Volunteered** Commencement Usher, Spring 2017 Commencement Ceremony, May 2017 2017

5. **Volunteered** Committee Member, Graduate Admissions Committee, Department of Computer Science and Engineering, Mississippi State University 2016-Present
6. **Volunteered** Committee Member, Publicity and Recruitment Committee of Computer Science and Information Systems, Northwest Missouri State University 2015
7. **Volunteered** Committee Member, Curriculum Committee of M.S. in Applied Computer Science, Northwest Missouri State University. 2015

Other Service Activities

1. **Volunteered** Session Chair, 27th IEEE International Requirements Engineering Conference (RE'19), Jeju Island, South Korea, 2019. 2019
2. **Volunteered** Session Chair, 18th International Conference on Software and Systems Reuse (ICSR'19), Cincinnati, OH, USA, 2019. 2019
3. **Volunteered** Judge, Mississippi Science and Engineering Fair, Starkville, Mississippi, USA, 2019. 2019
4. **Volunteered** Judge, Starkville Academy Annual Science Fair, 2018 2018
5. **Refereed** Session Chair, 25th IEEE International Requirements Engineering Conference Workshops (REW), Lisbon, Portugal, 2017. 2017
6. **Invited** Article, Tanmay Bhowmik, "Creativity in Requirements Engineering: Why and How?", IEEE Software Blog, Nov. 2016 2016
7. **Volunteered** Judge, Spring Undergraduate Research Symposium, Mississippi State University, April 23, 2015. 2015
8. Student **Volunteer**, 22nd IEEE International Requirements Engineering Conference (RE 2014), Karlskrona, Sweden, August 25-29, 2014. 2014
9. **Volunteered** Webmaster, Empirical Software Engineering Research Group⁵, Mississippi State University. 2014-2015
10. Mentored a Computer Science major undergraduate student for two years at Mississippi State University. 2012-2013
11. Advised two high school students during the summer research program at Mississippi State University (one student eventually enrolled into the CSE program). 2012-2013

EXTRA-CURRICULAR INVOLVEMENTS

1. Board Member, Starkville Multicultural Lion's club Starkville, Mississippi 2014-2015
2. Volunteer, Starkville Multicultural Lion's club Starkville, Mississippi 2013-2016
3. Vice-President Communication, Bangladesh Association Mississippi State University 2010
4. Webmaster, Bangladesh Association Mississippi State University 2009-2010

⁵ <http://www.cse.msstate.edu/~ese/>

	5. Coordinator, Chayanika The Art and Cultural Club of NIT Durgapur, India	2006
PROFESSIONAL AFFILIATIONS	1. IEEE Computer Society	2013-Present
	2. Association for Computing Machinery (ACM)	2013-Present
	3. ACM, Mississippi State University Chapter	2010
REFERENCES	Available on request.	