FARZANA RAHMAN

CURRENT AFFILIATION
Visiting Assistant Professor
School of Computing and Information Sciences
Florida International University
Email: farahman@fiu.edu
Web: https://farahman.github.io/

PRESENT ADDRESS
1200 SW 8th St ECS 381
Miami, FL 33199

RESEARCH INTERESTS

Mobile healthcare; Computer science education; Impact of active learning pedagogy in undergraduate CS courses; Empirical assessment of modern learning principles in the context of undergraduate computing education; Factors for success in introductory programming; Effectiveness of online and inverted classrooms; and Broadening participation of women and underrepresented students in CS.

EDUCATION

- **PhD** in Computer Science — May 2013
  Marquette University, WI, USA
  Dissertation: *Ensuring Application Specific Security and Privacy Requirements for Current and Next Generation RFID Systems*
  Advisor: Dr. Sheikh Iqbal Ahamed
- **MS** in Computer Science — Aug 2010
  Marquette University, WI, USA
  Thesis: *Towards Secure And Scalable Tag Search Approaches for Current and Next Generation RFID Systems*
- **BSc** in Computer Science and Engineering — Jan 2008
  Bangladesh University of Engineering and Technology (BUET), Dhaka, Bangladesh
  Thesis: *Minimizing Broadcast Redundancy for Ad-hoc Wireless Network*

PROFESSIONAL EXPERIENCES

- Visiting Assistant Professor — Jan 2018 – at present
  School of Computing and Information Sciences, Florida International University
- Assistant Professor (tenure-track) — Aug 2013 – Dec 2017
  Dept. of Computer Science, James Madison University
- Director, Mobile and Embedded Systems (MEMS) Lab — Aug 2014 – Dec 2017
  Dept. of Computer Science, James Madison University
- Director, Undergraduate Research Experience (REU) in Computer Science — Summer 2017
  Dept. of Computer Science, James Madison University
- Freshman Advisor — 2013 – 2014
  Dept. of Computer Science, James Madison University
- Instructor — 2012 – 2013
  Dept. of MSCS, Marquette University
- Research Assistant — 2011 – 2012
  Ubicomp Lab, Marquette University
- Teaching Assistant — 2008 – 2011
  Dept. of MSCS, Marquette University

GRANTS AND FUNDING

- Co-PI: Madison Trust Award for DIGITAL-Dukes Inspiring Girls into Technology Across Limits, 2017 (From BAE Systems) ($25,000)
- Co-PI: Madison Trust Award for DIGITAL-Dukes Inspiring Girls into Technology Across Limits, 2017 (From Verizon) ($10,000)
- PI: Provost Research Award for Research Experience for Undergraduates on Socially Conscious Computing, 2016 ($15,000)
- PI: Faculty Development Mini Grant from CISE for Computer Science REU Prorgam, 2016 ($5,000)
- PI: 4VA award for Computer Science for Virginia (CS4VA) programming outreach initiative, 2015 ($3,000)
- PI: Pass It On Awards by Anita Borg Institute on Diversity Camp for CS: Diversifying the Computer Science K-12 Pipeline through special programming workshops, 2014 ($3,000)
- Consultant: Broadening Participation in CS0 course using AppInventor with PI: Helen Hu (Westminster College), AACU TIDES Program, 2014 ($300,000)
- PI: Faculty Development Mini Grant from CISE for Mobile Computing Research, 2013 ($5,000)
- PI: An industry grant by SAIC for Mobile Computing Lab and Course Curriculum Development, 2013 ($10,000)

PUBLICATIONS

Refereed Journal Papers

- Farzana Rahman, Md. Endadul Hoque, Sheikh Iqbal Ahamed. AnonPri: A secure anonymous private authentication protocol for RFID systems. In Elsevier Journal of Information Sciences, Vol. 379, pp. 195-210. 2017.
- Farzana Rahman, Md. Zakirul Alam Bhuiyan, Sheikh Iqbal Ahamed: A privacy preserving framework for RFID based healthcare systems. Elsevier Journal of Future Generation Comp. Syst. Vol. 72, pp. 339-352. 2017.
- Farzana Rahman and Sheikh Iqbal Ahamed. Efficient Detection of Counterfeit Products in Large Scale RFID Systems with Batch Authentication Protocols. Journal of Personal and Ubiquitous Computing, Springer-Verlag. 2012. pp. 1-12.
- Farzana Rahman, Casey O'Brien, Sheikh I. Ahamed, He Zhang and Lin Liu. Design and implementation of an open framework for ubiquitous carbon footprint calculator applications. Elsevier Journal of Sustainable Computing: Informatics and Systems, Volume 1, Issue 4, December 2011. pp. 2210-5379.
- Farzana Rahman, Endadul Hoque, and Sheikh I. Ahamed. Preserving privacy in wireless sensor networks using reliable data aggregation. SIGAPP Applied Computing Review, Volume 11, Issue 3, August 2011. pp. 52-62.
- Endadul Hoque, Farzana Rahman, Sheikh I. Ahamed, and Jong Hyuk Park. Enhancing Privacy and Security of RFID System with Serverless Authentication and Search Protocols in Pervasive Environments. Journal of Wireless Personal Communication, Springer, Volume 55, Issue 1, 2009. pp. 65-79.
- Sheikh I. Ahamed, Munirul M. Haque, Endadul Hoque, Farzana Rahman, and Nilothpal Talukder. Design, Analysis, and Deployment of Omnipresent Formal Trust Model (FTM) with Trust Bootstrapping for Pervasive Environments. Elsevier Journal of Journal of Systems and Software (JSS), Volume 83, Issue 2, February 2010. pp. 253-270.

Peer-Reviewed Conference Papers

- Farzana Rahman. Integrating Project-Based Learning in Mobile Development Course to Enhance Student Learning Experience. In Proceedings of the the 19th Annual Conference on Information Technology Education (SIGITE), Ft Lauderdale, FL, October 2018.

- Farzana Rahman. Leveraging Visual Programming Language and Collaborative Learning to Broaden Participation in Computer Science. In Proceedings of the the 19th Annual Conference on Information Technology Education (SIGITE), Ft Lauderdale, FL, October 2018.
- Saiyma Sarmin, Nafisa Anzum, Kazi Hasan Zubaer, Farzana Rahman, A. B. M. Alim Al Islam. Securing Highly-Sensitive Information in Smart Mobile Devices through Difficult-to-Mimic and Single-Time Usage Analytics. To Appear In Proceedings of the 15th EAI International Conference on Mobile and Ubiquitous Systems, Computing, Networking and Services (MobiQuitous),November 2018.
- Farzana Rahman. From App Inventor to Java: Introducing Object-oriented Programming to Middle School Students Through Experiential Learning. In Proceedings of the 2018 ASEE Annual Conference and Exposition (ASEE), Salt Lake City, UT, July 2018.
- Farzana Rahman, Healthy Hankerings: Motivating Adolescents to Combat Obesity with a Mobile Application. To appear 20th International Conference on Human-Computer Interaction, HCI International 2018, Las Begas, NV. 2018.
- AKM Jahangir Alam Majumder, Yosuf ElSaadany, Mohammed ElSaadany, Donald Ucci, and Farzana Rahman. A Wireless IoT System Towards Gait Detection in Stroke Patients. To Appear in Proc. of IEEE International Workshop of Mobile and Pervasive Internet of Things (PerIoT 2017), in Conjunction with IEEE Percom 2017.Hawaii, USA. 2017.
- Sajeda Akter, Farzana Rahman, A. B. M. Alim Al Islam: Securing app distribution process of iOS exploiting the notion of authentic update. In Proc. of International Conference on Networking Systems and Security (NSysS), 2016. [**Best Paper Award**]
- Farzana Rahman. Improving Class Experience and Performance in CS1 Course Using JiTT and Peer Instruction. In proc. of the World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education (E-Learn). 2016.
- Farzana Rahman, Ivor D. Addo, Sheikh Iqbal Ahamed, Ji-Jiang Yang, Qing Wang. Privacy Challenges and Goals in mHealth Systems. Advances in Computers 102: 47-62. 2016.
- Farzana Rahman, Drew Williams, Sheikh I. Ahamed, Ji-Jiang Yang and Qing Wang. PriDaC: Privacy Preserving Data Collection in Sensor Enabled RFID Based Healthcare Services. In Proc of the IEEE International Symposium on High Assurance Systems Engineering Conference (HASE 2014), USA, 2014.
- Farzana Rahman, Endadul Hoque, Sheikh I. Ahamed, and Mohammad Arif Ul Alam. Preserving User Privacy in Pervasive Environments with a Collaborative Model. In Proc. of International Workshop on Trustworthy Computing, Collocated with IEEE International Conference on Software Security and Reliability (SERE 2013). Washington, D.C, USA, 2013.
- Farzana Rahman, and Sheikh Iqbal Ahamed. Towards Improving Reliability of Computational RFID based Smart Healthcare Monitoring Systems. In Proc. of the 11th International Conference on Smart homes and health Telematics (ICOST 2013), Singapore, 2013.
- A.K.M. Jahangir Alam Majumder, Farzana Rahman, Ishmat Zerin, Ebel Jr. William, and Sheikh Iqbal Ahamed. iPrevention: Towards a Novel Real-time Smartphone-based Fall Prevention System. In Proc. of ACM Symposium on Applied Computing (ACM SAC 2013). Italy, March, 2012.
- Farzana Rahman, Sheikh Iqbal Ahamed, Ji-Jiang Yang and Qing Wang. I am not a goldfish in a bowl: A Privacy Preserving Framework for RFID based Healthcare Systems. In Proc. of IEEE 14th International Conference on e-Health Networking, Applications and Services (Healthcom 2012). China, October, 2012. pp. 335–340. [**Best paper award**]
- Farzana Rahman and Sheikh Iqbal Ahamed. MonAC: Detecting Missing Tags for Improved Accuracy in Computational RFID based Assisted Environments. In Proc. of the ACM Symposium on Research in Applied Computation (ACM RACS 2012). Texas, USA, October, 2012.
- Farzana Rahman and Sheikh Iqbal Ahamed. DRAP: A Robust Authentication Protocol to Ensure Survivability of Computational RFID Networks. In Proc. of ACM Symposium on Applied Computing (ACM SAC 2012). Italy, March, 2012. pp. 498-503. [Acceptance rate: 24%]

- Farzana Rahman, Casey O'Brien, Kristine Manning, Jason Cowdy, Sheikh Iqbal Ahamed, Let EcoDrive be Your Guide: Development of a Mobile Tool to Reduce Carbon Footprint and Promote Green Transport. In Proc. of ACM Symposium on Applied Computing (ACM SAC 2012). Italy, 2012. pp. 519-524. [Acceptance rate: 25%]
- Endadul Hoque, Farzana Rahman, and Sheikh I. Ahamed. AnonPri: An Efficient Anonymous Private Authentication Protocol. in Proc. of the IEEE International Conference on Pervasive Computing and Communications (PerCom 2011), WA, USA, March 2011. pp. 102-110. [Acceptance rate: 11%].
- Farzana Rahman, Endadul Hoque, and Sheikh I. Ahamed. REBIVE: A Reliable Private Data Aggregation Scheme for Wireless Sensor Networks. In Proc. of the ACM Symposium on Applied Computing (ACM SAC 2011), Taiwan, March 2011. pp. 439-444. [Acceptance rate: 26%]
- Farzana Rahman, Endadul Hoque, Ferdous Kawser, and Sheikh Iqbal Ahamed. Preserve Your Privacy with PCO: A Privacy Sensitive Architecture for Context Obfuscation for Pervasive E-Community based applications. In Proc. of the IEEE International Conference on Social Computing (SocialCom 2010), MN, USA, 2010. pp. 41-48. [Acceptance rate: 13%].
- Endadul Hoque, Farzana Rahman, and Sheikh Ahamed. Supporting Recovery, Privacy and Security in RFID Systems Using a Robust Authentication Protocol. In Proc. of the 24th ACM Symposium on Applied Computing (ACM SAC 2009), Hawaii, USA, March, 2009. pp. 1062-1066.
- Sheikh I. Ahamed, Endadul Hoque, Farzana Rahman, and Mohammad Zulkernine. Towards Secured Trust Bootstrapping in Pervasive Computing Environment. In Proc. of the IEEE High Assurance Systems Engineering Symposium (HASE 2008), China, December, 2008. pp.89-96. [Acceptance rate 22%]
- Sheikh I. Ahamed, Farzana Rahman, Endadul Hoque, Fahim Kawsar, and Tatsuo Nakajima. S3PR: Secure Serverless Search Protocols for RFID. In Proc. of the IEEE International Conference on Information Security and Assurance (ISA 2008), Korea, April, 2008, pp.187-192.
- Sheikh Iqbal Ahamed, Farzana Rahman, and Endadul Hoque. Secured Tag Identification Using EDSA (Enhanced Distributed Scalable Architecture). In Proc. of the ACM Symposium on Applied Computing (ACM SAC 2008), Brazil, March, 2008. pp. 1902-1907.

Peer-Reviewed Workshop Papers, Panels, BoFs, and Posters

- Farzana Rahman, Susan Chatfield. **Poster**: Detecting Wandering Behaviour in Patients with Dementia with a Mobile Application. 2017 IEEE MIT Undergraduate Research Technology Conference (URTC), Cambridge, MA, 2017
- Farzana Rahman, Perry Fizzano, Evan M. Peck, Shameem Ahmed, and Stu Thompson. **BOF**: How to Build a Student-Centered Research Culture for the Benefit of Undergraduate Students. To appear ACM SIGCSE 2018. (Abstract only)
- Farzana Rahman, Mohsen Dorodchi. **BOF**: Effective POGIL Implementation Approaches in Computer Science Courses. To appear ACM SIGCSE 2018.
- Farzana Rahman, Suzanne Matthews, Andrea Danyuk, and Kelly Shaw. **Panel**: Can we really do it? Conducting Significant Computer Science Research in Primarily Undergraduate Institutions (PUIs). TIn Proc. of ACM SIGCSE 2017.
- Farzana Rahman, Dennis Brylow, Clif Kussmaul, and Helen Hu. **Panel**: Bringing Undergraduate Research Experience in Non-R1 Institutions. In Proc. of ACM SIGCSE 2017.
- Farzana Rahman, Md Osman Gani, Golam Mushih Tanimul Ahsan, and Sheikh lqbal Ahamed. Seeing beyond visibility: A Four Way Fusion of User Authentication for Efficient Usable Security on Mobile Devices. In Proc. of International Workshop on Trustworthy Computing, Collocated with IEEE International Conference on Software Security and Reliability (SERE) CA, 2014.
- Paul Henninger, David Kegley, Keegan Sullivan, James Yoo, and Farzana Rahman. Healthy Hankerings: Obesity Control in Adolescent with Healthy Food Picker Mobile Application. Poster in Grace Hopper Conference (GHC 2016).

- Farzana Rahman, Dee A. B. Weikle. **BoF**: Juggling the Jigsaw: Enabling CS1 Growing Enrollment and Diversity at Undergraduate Institutions. ACM SIGCSE 2015.
- Farzana Rahman, Jennifer Stevens, Sharon Simmons. **BoF**: CS 4 Everyone: Diversifying the K-12 Pipeline for CS at College and High School Level. ACM SIGCSE 2015.
- Farzana Rahman, A.K.M. Jahangir Majumder, Kristina Mensch, Colin Ostberg, Syam Ahmed, and Sheikh Iqbal Ahamed. mHealthMTT: Bridging the Gap in Communication Using a Mobile Based Intervention for Maternal and Child Healthcare in Rural Bangladesh. Poster In Proc. of the Forward Thinking Poster Session Presentation, Marquette University, December 2012. [**Best poster award**]
- Farzana Rahman and Sheikh Iqbal Ahamed. Looking for needles in a haystack: Detecting Counterfeits in Large Scale RFID Systems using Batch Authentication Protocol. In Proc. of IEEE PerCom Workshop on Pervasive Wireless Networking (PWN12). Switzerland, March, 2012. pp. 811-816. [Acceptance rate: 20%]
- Endadul Hoque, Farzana Rahman, Sheikh I. Ahamed, and Lin Liu. Trust Based Security Auto-Configuration for Smart Assisted Living Environments. In Proc. of the ACM Workshop on Assurable and Usable Security Configuration (SafeConfig 2009) collocated with ACM CCS 09, Chicago, USA, 2009, pp. 7-11.

TEACHING

Florida International University

- COP 2210: Computer Programming I
- CDA 4101: Structured Computer Organization

James Madison University

- CS 101: Introduction to Computer Science (Survey Course)
- CS 139/149: Programming Fundamentals
- CS 159: Advanced Object Oriented Programming
- CS 240: Data Structure
- CS 280: Programming Challenges
- CS 480: Mobile App Development
- CS 685: Mobile Computing and Security

Marquette University

- Pervasive and Mobile Computing (worked as a TA)
- Elements of Software Development (worked as a TA)
- Introduction to Programming Language (worked as an instructor)
- Object Oriented Software Design with JAVA (worked as an instructor)
- Calculus 1 (worked as an instructor)

AWARDS AND HONORS

- Provost LA Initiative Award for Spring 2018, 2Florida International University, 2018
- **Best paper award**, 2016 IEEE Conference on Networking Systems and Security (NSysS' 16), 2016
- **Fall 2014 Systers Pass-It-On (PIO) Award**, Anita Borg Institute, 2014
- **Most Active Junior Faculty**, James Madison University, 2014
- CRA Career Mentoring Workshop Award, ACM SIGCSE, 2013
- NSF travel grant to attend Grace Hopper Conference 2012, 2011, 2010
- NSF travel grant to attend IEEE PerCom 2012, 2011

- NSF travel grant to attend ACM CCS 2011
- NSF travel grant to attend IEEE Pervasive Computing and Communication (PerCom 2011)
- CRA scholarship recipient to attend Grad Cohort Workshop 2011
- Travel grant award to attend Richard Tapia Conference 2011
- Grace Hopper Scholarship by NSF to attend Grace Hopper Conference 2010
- **Google Anita Borg Scholarship finalist**, 2010

STUDENTS SUPERVISED

- Tanner Allen Wernecke (Independent Study on *RememberME: A Mobile Health System to Detect Early Onset of Schizophrenia*)
- Jamie Martin (Research supervised on *Mobile based childhood cancer registration system*)
- Marissa Halpert (Research supervised on *MNCare: Mobile base palliative care management system for mother and newborn*)
- Karina Bekova (Independent Study on *Introducing computational thinking to middle school girls via AppInventor*)
- Jing Feng (Research supervised on *EasierCollege: A Rich Note Editor for College Students*)
- Aimme Cunningham (Research supervised on *Early Detection of Autism using Mobile Devices*)
- Laura Vandyuke (Research supervised on *Healthy Hankering: Obesity Control in Adolescents using Mobile Devices*)
- Matthew Petty (Research supervised on *Mobile Virtual Reality Application for the Demonstration of Computer Science Concepts*)

SERVICE ACTIVITIES

Co-Founder

- **Computer Science for Virginia (CS4VA)** A one-day CS outreach program to build a Virginia statewide network of communities to create a more diverse and expanded CS K-12 pipeline.

Co-Founder

- **Bangladeshi Women in Computer Science and Engineering (BWCSE)** is the first platform aiming to elevate the status of Bangladeshi women in computing research by assisting them in achieving their career goals (https://bwcse.wordpress.com/)

Professional

- Program Co-chair of IEEE International Workshop on Mobile and Pervasive Internet of Things (PerIoT 2017-2019) in conjunction with IEEE PerCom
- Program Co-chair of IEEE International Workshop on Embedded Internet of Things (eIoT 2018, 2017) in conjunction with IEEE COMPSAC
- Program Co-chair of IEEE International Workshop on Security, Trust, and Privacy for Software Applications (STPSA 2015, 2014) in conjunction with IEEE COMPSAC
- Program Co-chair of the Faculty track of Grace Hopper Celebration of Women in Computing, 2018-2019
- Conference Co-chair of of ACM-W Capital Area Celebration of Women in Computing (CAPWIC 2017)
- Program Chair of ACM-W CAPWIC 2016, 2015, 2014
- Program Committee member of Grace Hopper Conference (GHC) 2017, 2016
- Program Committee member of IEEE COMPSAC 2018, 2017, 2016, 2015, 2014, 2013

- Program Committee member of IEEE International Conference on Networking Systems and Security (NSysS) 2017, 2016, 2015, 2014
- Program Committee member of International Symposium on Dependability in Sensor, Cloud, and Big Data Systems and Applications (DependSys 2016, 2015)
- Program Committee member of Women in Cyber Security Conference (WiCyS 2016, 2017)
- **External reviewer for conferences**
  - IEEE COMPSAC (2013, 2014, 2015, 2016, 2017, 2018)
  - ACM SIGCSE (2014, 2015, 2016, 2017, 2018)
  - ACM CHI (2014, 2015)
  - IEEE STPSA (2014, 2015, 2016)
  - ACM RACS (2013, 2014)
  - IEEE NSysS (2014, 2015, 2016)
  - IEEE SocialCom 2015
  - IEEE DependSys (2015, 2016)
  - IEEE DCAS (2016, 2017)
  - GHC (2016, 2017, 2018)
  - WiCyS (2016, 2017)
- **Reviewer for journals**
  - IEEE Transactions on Parallel and Distributed Systems (TPDS) [2013, 2014, 2018]
  - Elsevier Journal of Systems and Software (JSS) [2013]
  - IEEE Transactions on Information Forensics and Security [2012, 2013, 2017]
  - Journal of Wireless Communication and Mobile Computing (2012)
  - Wiley InterScience (2008, 2009, 2011)
  - IEEE Transactions on Services Computing [2008, 2009]

University and Department Committees

- Graduate Program Committee
- Computer Science Faculty Search Committee [2014, 2016]
- College Diversity Committee [2015 – present]
- Department Grace Hopper Selection Committee
- Faculty advisor for Women in Technology (WIT) club [2013 – present]
- Computer Oriented Career Council (CoCo) Advisory Committee
- College Career Advisory Board

K-12 Outreach

- Computer Science Teaching Academy – a 5-day summer workshop for high school computer science teachers [2014]
- Workshop leader, Hour of Code: Build an App with MIT App Inventor during CS ED week at James Madison University [2013, 2014]
- Developed curriculum for DIGITAL programming outreach event in James Madison University [2014, 2015, 2016]
- Delivered BoF Session on JMU WiT Club: Engaging Diverse Undergraduate Women in Technologies at southeast women in computing conference (SWCC) [2013]
- AppInventor Workshop for 6 consecutive Saturday for Middle School Kids [2014]

SELECTED PRESENTATIONS

- *How to Build a Student-Centered Research Culture for the Benefit of Undergraduate Students*, in ACM SIGCSE 2018
- *Effective POGIL Implementation Approaches in Computer Science Courses*, in ACM SIGCSE 2018
- *Can we really do it? Conducting Significant Computer Science Research in Primarily Undergraduate Institutions (PUIs)*, in ACM SIGCSE 2017
- *Bringing Undergraduate Research Experience in Non-R1 Institutions*, in ACM SIGCSE 2017
- *Making the Leap: Jumping into An(other) Academic Position*, in Grace Hopper Conference 2017
- *Surviving 50 shades of academic motherhood*, in Grace Hopper Conference 2016
- *CS 4 Everyone: Diversifying the K-12 Pipeline for CS at College and High School Level*, in ACM SIGCSE 2015
- *Juggling the Jigsaw: Enabling CS1 Growing Enrollment and Diversity at Undergraduate Institutions*, in ACM SIGCSE 2015
- *Looking for needles in a haystack: Detecting Counterfeits in Large Scale RFID Systems using Batch Authentication Protocol?*, in IEEE PerCom Workshop PWN, Switzerland, 2012
- *AnonPri: An Efficient Anonymous Private Authentication Protocol*, in IEEE PerCom, 2011
- *Preserve Your Privacy with PCO: A Privacy Sensitive Architecture for Context Obfuscation for Pervasive E-Community based applications?*, in IEEE SocialCom, MN, USA, 2010

COLLABORATION EXPERIENCE

- Florida International University, with Mario Eraso on Effectiveness of online learning assistants in online computing courses.
- George Mason University, with Kamaljeet Sanghera on Diversifying the K-12 Pipeline in CS
- James Madison University, with Dr. Chris Mayfield on Process Oriented Guided Inquiry Learning in Introductory Computer Science Courses
- Miami University, Department of Computer Science, with Dr. Jahangir Majumder on Wireless IoT System Towards Gait Detection in Stroke Patients
- James Madison University, Department of Mathematics: Submitted a proposal in collaboration to AACU TIDES Program on Broadening Participation in Computational Mathematics using Multi-disciplinary Courses in the Life Sciences
- Westminster college: Submitted and received a grant with Prof. Helen Hu on Broadening Participation in CS0 course using AppInventor from AACU TIDES Program
- Tsinghua university: Designed and implemented a framework for developing various ubiquitous carbon footprint applications in iOS platform
- International Breast Cancer Research Foundation (IBCRF): Studies the privacy concerns of South Asian People and how they are influenced by their demographic background, cultural and traditional issues, and some other key factors that are specific to developing countries.

PROFESSIONAL DEVELOPMENT

- Participated at JmuDesign Institute in 2013, an intensive 7 day workshop to design and develop new courses (Designed Mobile Computing course)
- Attended, NSF Grant Writing Workshop - ACM SIGCSE 2013
- Invited Participant, CRA-W Career Mentoring Workshop (2014, 2016)
- Invited Participant, CRA-W Grad Cohort (2010, 2011)

REFERENCES

Available upon request