

AKOND ASHFAQUE UR RAHMAN

PERSONAL DETAILS

Current Address:
633 Chappell Drive Apartment A, Raleigh, North Carolina, USA
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RESEARCH INTERESTS

Continuous Deployment, DevOps, Mining Software Repositories

FORMAL EDUCATION

- **Doctor of Philosophy in Computer Science**
 - Duration: August 2014 - Current
 - Institution: North Carolina State University
 - CGPA: 3.93 on a scale of 4.00
 - **Master of Science in Computer Science and Engineering**
 - Duration: January 2012 - May 2014
 - Institution: University of Connecticut
 - CGPA: 3.80 on a scale of 4.00
 - **Bachelor of Science in Computer Science and Engineering**
 - Duration: December 2004 - September 2009
 - Institution: Bangladesh University of Engineering and Technology
 - CGPA: 3.55 on a scale of 4.00
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PUBLICATIONS

- **Akond Ashfaque Ur Rahman**, Eric Helms, Laurie Williams, and Chris Parnin. *Synthesizing Continuous Deployment Practices in Software Engineering* in 13th Agile Conference, Washington D.C., USA, 2015 (*Accepted*).
 - **Akond Ashfaque Ur Rahman**, Md. Atiqul Islam Mollah, and Mahmuda Naznin. *Multiple Targets Tracking Using Kinematics in Wireless Sensor Networks* in Wireless Sensor Networks, SCIRP, 2011.
 - **Akond Ashfaque Ur Rahman**, Mahmuda Naznin, and Md. Atiqul Islam Mollah. *Energy Efficient Multiple Targets Tracking Using Target Kinematics in Wireless Sensor Networks* in SensorComm, Venice, 2010.
 - M.M.Shahiduzzaman, Mahmuda Naznin, and **Akond Ashfaque Ur Rahman**. *Portable and Secure Multimedia Data Transfer in Mobile Phones Using Record Management Store (RMS)* in 3rd IEEE ICCSIT, Chengdu, 2010.
 - **Akond Ashfaque Ur Rahman**, Mahmuda Naznin, and Md. Atiqul Islam Mollah. *Service Priority Based Target Tracking Framework in a Wireless Sensor Network* in 3rd IEEE ICCSIT, Chengdu, 2010.
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AWARDS & HONORS

- **Dean's List Award** for academic excellence in the session 2006-2007 in Bangladesh University of Engineering and Technology.
- **University Scholarship for Merit** for different semesters in Bangladesh University of Engineering and Technology.
- **First prize** in IUT National ICT Festival, 2009 in Software Projects category for project **EKATTOR**.

PROFESSIONAL EXPERIENCE

- **Software Research Intern**

- Appointment: USCRC, ABB Inc., Raleigh, USA
- Duration: May 2015 - August 2015
- Responsibility: Identifying and applying mining techniques for software repositories

- **Software Engineer**

- Appointment: Dohatec New Media, Dhaka, Bangladesh.
- Duration: January 2010 - June 2011.
- Responsibility: Development and testing of software projects related to online procurement and biometrics.

- **Teaching Assistant**

- Appointment: Department of Computer Science, North Carolina State University
- Duration: August 2014 - May 2015
- Responsibility: Grading homeworks and exams and providing lectures

- **Graduate Assistant**

- Appointment: Engineering Computing Services (ECS), University of Connecticut.
- Duration: June 2013 - May 2014.

- **Teaching Assistant**

- Appointment: Department of Computer Science and Engineering, University of Connecticut.
- Duration: August, 2012 - December, 2012.
- Theme: Basic MATLAB programming.
- Responsibility: Providing lectures, administrating labs, grading homeworks and exams.

TECHNICAL SKILLS

Programming Languages Java, Python, C, C#, SQL, HTML, nodeJS, Bash Scripting, PHP.

Data Analysis Tools R Studio, Excel, Matlab, SciKit .

DevOps Tools Jenkins, JUnit, AWSDeployment,Vagrant .

Plugin Development Tools Wordpress, Android Development Kit, Eclipse Plugin Development Kit .

MAJOR PROFESSIONAL PROJECTS

- **Mining Open Source Software Repositories:** Mining software repositories to facilitate developer productivity. Implemented using standard data analysis tools.
- **Multi Modal Biometric SDK:** A software development kit which provides multi-functional biometric utilities like capturing, quality checking, auto rotation, cropping, etc. of biometric images like face, finger, and iris. Implemented using the Megamatcher 3.1 SDK tool. Participation in development and maintenance.
- **Central Procurement Management Information System (PROMIS):** A complete information management system developed for the Planning Ministry of the Government of People's Republic of Bangladesh. Participation in development and maintenance. Implemented using C#, ADO.NET, Microsoft SQL-SERVER 2005, and Crystal Report 8.0.

MAJOR ACADEMIC PROJECTS

- **Correlation of Interleaving and Build Success: A Case Study for *Codealike*:**

Codealike is an automated software tool that tracks information of programmer interaction in different programming environments. The objective of this study was to investigate an existing Codealike dataset to derive hypotheses to find new programmer metrics. Analysing a dataset of 340 users we concluded that the degree of interleaving is positively correlated with project build failures.

- ***Decaf* Compiler:** The goal of this project was to implement a compiler for *Decaf*, a subset of the Java programming language. This project used Java, JavaCC, and Jasmin to compile and run 120 Decaf programs.
- **Investigating the Relationship Between Monetary Incentives and Quality Programming: A Pilot Study:**

Motivating factors for programmers is a well studied topic but the factors that influence writing quality programming solutions still remains an open question. This study investigated if monetary incentives can be a motivational factor for writing quality programming solutions. The study did not find strong evidence of monetary incentives acting as a motivating factor for writing quality programming solutions.

- **Finding the Optimal Comfort Temperature of a Human using Bio Sensors:**

This goal of this project was to introduce a novel technique to control different thermal systems. This project proposed a “user-oriented” methodology that leveraged physiological measures and activities of human. The final output of this project was a functional Android application integrated with a wearable sensor called “Bio Harness Kit” which provides different physiological measures of human.

- **EKATTOR:** A complete web-based information management system to preserve liberation war history of Bangladesh. Along with essential database operations such insert, update, and delete, this project also provide four kinds of searching privileges namely entity wise search, map-based search, category wise search, and non-category wise search.