

Abu Awal Md Shoeb

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Research Interest

Machine Learning, Natural Language Processing, Web Mining, Information Extraction, Cloud Computing, Distributed Systems, Cyber Security

Education

- 2015 - present **Ph.D. in Computer Science**
Rutgers University, New Brunswick, NJ
GPA 3.72/4.00
- 2013 - 2015 **M.Sc. in Computer and Information Sciences**
University of Alabama at Birmingham (UAB), Birmingham, Alabama
Advisor: Dr. Ragib Hasan
GPA 3.27/4.00
- 2003 - 2008 **B.Sc. Engineering in Computer Science and Engineering**
Shahjalal University of Science and Technology (SUST), Bangladesh
Thesis: Implementation of Grid Computing and its Performance Evaluation under the Alchemi Toolkit
Advisor: Khalad Hasan
GPA 3.70/4.00

Teaching Experience

- 2015 - present **Rutgers University, New Brunswick, NJ**
Teaching Assistant, Dept. of Computer Science
Courses:
 - CS 211 Computer Architecture (Overall student rating 4.53/5)
 - CS 314 Principles of Programming Languages (Overall student rating 4.22/5)
 - CS 214 System Programming (Overall student rating 4.25/5)
- 2009 - 2013 **Shahjalal University of Science and Technology (SUST), Bangladesh**
Lecturer, Dept. of Computer Science and Engineering (CSE)
 - CS 223 Electronic Communication (Class size 60)
 - CS 233 Object Oriented Programming Java (Class size 85)
 - CS 333 Database Management System (Class size 120)
 - CS 431 Computer Networking (Class size 75)
 - CS 445 Web Engineering (Class size 80)
- 2009 - 2013 **Center for Research Testing and Consultancy (CRTC), CSE, SUST, Bangladesh**
Adjunct Faculty
Courses:
 - Basic Web design using CSS, HTML, JavaScript, PHP
 - Object Oriented Programming Java

- Structured Programming Language C

2010-2013 **Leading University, Sylhet, Bangladesh**
 Part Time Lecturer
 Courses:

- Object Oriented Programming Java
- Structured Programming Language C
- Relational Database Management System

2011-2011 **Metropolitan University, Sylhet, Bangladesh**
 Part Time Lecturer
 Course:

- Object Oriented Programming Java

Work Experience

2015 - present **Douglass DIMACS Computing Corps (DDCC), Rutgers University**
 Graduate Mentor

Summer 2018 **Nokia Bell Labs, Murray Hill, NJ**
 Summer Intern

Summer 2017 **Nokia Bell Labs, Murray Hill, NJ**
 Summer Intern

Summer 2015 **MedSnap LLC, Birmingham, Alabama**
 Software Engineer Intern

2013 – 2015 **University of Alabama at Birmingham (UAB), Birmingham, Alabama**
 Research Assistant, SeCuRE and Trustworthy Computing Lab (SECRETLab)

Summer 2014 **MedSnap LLC, Birmingham, Alabama**
 Software Engineer Intern

2013 - 2013 **Dhaka Stock Exchange Ltd., Dhaka, Bangladesh**
 External IT Consultant

- Member of an investigative team to identify the origin of the problem of new MSA Plus Trading software launched by Dhaka Stock Exchange Ltd.

2013 - present **Criss Cross Computers, Bangladesh** (<http://www.crisscrossbd.com>)
 Co-Founder

- Designed and implemented first ever e-payment system for students at SUST, a renowned public university in Bangladesh (www.sust.edu/epayment)

2009 - 2010 **Center for Research Testing and Consultancy (CRTC), CSE, SUST**
 Coordinator

- Designed and implemented first ever mobile SMS based registration system for undergraduate admission test in Bangladesh

2008 - 2009

United Nations Development Programme (UNDP), Dhaka, Bangladesh

e-Service Programmer, Access to Information (A2I) program, Prime Minister's Office

- Designed and implemented framework of ICT services for different ministries of Bangladesh
- Architectural and database design of freedom fighters web application of 1971 liberation war of Bangladesh

Publications

- **Abu Awal Md Shoeb**, Dibya Mukhopadhyay, Shahid Al Noor, Alan Sprague, Gary Warner, "Spam Campaign Cluster Detection Using Redirected URLs and Randomized Sub-Domains", Social Informatics 2014, December 14-16, 2014, Cambridge, MA, USA (**Best Paper Award**)
- **Abu Awal Md Shoeb**, Ragib Hasan, Md. Haque, and Meng Hu, "A Comparative Study on I/O Performance between Compute and Storage Optimized Instances of Amazon EC2", IEEE Cloud 2014, June 27 – July 2, 2014, Alaska, USA
- Md. Abdullah Al Mumin, **Abu Awal Md Shoeb**, Md. Reza Selim, and Muhammed Zafar Iqbal, "SUMono: A Representative Modern Bengali Corpus", SUST Journal of Science and Technology (1682-895X), Vol. 21, No.1, 2014, P 78-86
- Sayma Sultana Chowdhury, **Abu Awal Md Shoeb**, "Performance Analysis of MPI (mpi4py) on Diskless Cluster Environment in Ubuntu", International Journal of Computer Applications, 2012
- Md. Abdullah Al Mumin, **Abu Awal Md Shoeb**, Md. Reza Selim, and Muhammed Zafar Iqbal, "SUPara: A Balanced English-Bengali Parallel Corpus", SUST Journal of Science and Technology (1682-895X), Vol. 16, No. 2, October 2012, P 46-51
- **Abu Awal Md. Shoeb**, Altaf Hussain, Md. Abu Naser Bikas, Md. Khalad Hasan, "An Extended Algorithm to Enhance the Performance of the Gridbus Broker with Data Restoring Technique", (ICCET 2009), ISBN 978-1-4244-3334-6, Pages 371-375
- Altaf Hussain, **Abu Awal Md. Shoeb**, Md. Abu Naser Bikas, Md. Khalad Hasan, "Runtime Thread Rescheduling: An Extended Scheduling Algorithm to Enhance the Performance of the Gridbus Broker", (ICCIT 2008), ISBN 978-1-4244-2135-0, Pages 80-87
- Md. Abu Naser Bikas, Altaf Hussain, **Abu Awal Md. Shoeb**, Md. Khalad Hasan, Md. Forhad Rabbi, "File Based GRID Thread Implementation in the .NET-based Alchemi Framework", (12th IEEE INMIC 2008), ISBN 978-1-4244-2823-6, Pages 468-472

Posters

- **Abu Awal Md Shoeb**, Shahab Raji, and Gerard de Melo, "EmoTag: Towards Understanding the Relationship between Emoji and Hashtags in Twitter", Rutgers CS Conference 2017, New Brunswick, NJ
- **Abu Awal Md Shoeb**, Hafiz Imtiaz, "Utilizing Hashtag in Opinion Mining and Sentiment Analysis for Customers Survey", MASC-SLL 2016, April 2016, University of Pennsylvania, PA, USA

Technical Reports

- **Abu Awal Md Shoeb** and Shahab Raji, "Query Social Media (Twitter) with HashTag and Analyze them by using Microsoft Cognitive Services", CS-674 Big Data Analytics and Text Mining, Rutgers University, Spring 2017
- **Abu Awal Md Shoeb**, "Position Paper – Is Private Browsing in Modern Web Browsers Really Private?", CS-553 Design of Internet Services, Rutgers University, Fall 2015
- **Abu Awal Md Shoeb**, "Forensics Analysis of a Hard Drive using EnCase", CS-537 Cybercrime and Forensics, University of Alabama at Birmingham, Spring 2015

Awards and Grants

- Graduate Teaching Assistantship, Dept. of Computer Science, Rutgers University (Fall 2015 - Present)
- TA-GA Professional Development Fund, Rutgers University, Summer 2016 and 2017
- Graduate Mentor, Douglass DIMACS Computing Corps, Rutgers University (November 2015 - Present)
- Best Paper Award in ASE International Conference on Social Informatics 2014, Harvard University, Cambridge, MA, USA (Dec 14-16, 2014)
- Dept. Travel Grant from University of Alabama at Birmingham to attend ASE International Conference on Social Informatics 2014, Harvard University, Cambridge, MA, USA (Dec 14-16, 2014)
- Graduate Research Assistantship, University of Alabama at Birmingham (Fall 2013 – Spring 2015)
- For Mobile SMS Based Registration System of University Admission Test
 - Emerging Young Talents (for the year 2010 by the Prothom Alo, the most popular and leading daily newspaper in Bangladesh)
 - mBillionth South Asian Award, *July 2010*, <http://mbillionth.in/milestones/mbillionth-2010/winners-2010/shahjalal-university-of-science-technology-sust/>
 - National e-Content Award, August 2010

Extra-Curricular

- President, Graduate Student Association (GSA), Rutgers University, 2016 - 17
- Elected Syndicate Member, Shahjalal University of Science and Technology, Bangladesh (2013-2017)
- Adviser, SUST Prothom-Alo Bondhushava
- Core Member, Bangladesh Open Source Network (BdOSN)
- Volunteer, Bangladesh National Mathematical Olympiad

Computer Skills

- Languages: C, Java, Python, PHP, JavaScript, MySQL, Oracle, PostgreSQL, SQLite, Scala
- Operating Systems: Windows, Macintosh, Ubuntu, Cent OS
- CMS: Joomla, WordPress
- Data Analysis Tools: JMP, WEKA, d3 JavaScript Framework, Apache Spark, jupyter
- Others: Docker, Grafana, Latex, Gitorious, Ansible, Prometheus, Amazon EC2 and S3, OpenStack, cAdvisor
- Computer Forensics Tool: EnCase
- Orchestration Framework: Kubernetes (K8)