

Khandakar Ashrafi Akbar

Personal Website: <http://aninditaashrafi.bitbucket.io/>

CONTACT INFORMATION	Block - D, Road No - 10, House No - 94, Talukder Villa, Niketan Housing Project, Gulshan - 1, Dhaka - 1212, Bangladesh. Hasin Manjil, Holding No - 450/451, Baganbari, Thakurpara, Comilla Sadar, Kotwali, Comilla - 3500, Bangladesh. aninditaashrafi@gmail.com +8801867147778
RESEARCH INTERESTS	Machine Learning, Data Mining, Human-Computer Interaction, Context Awareness, Computer Vision, Natural Language Processing, Cloud Computing, Data Analytics
PUBLICATIONS	Maitraye Das, Nusrat Jahan Mozumder, Sharmin Afrose, Khandakar Ashrafi Akbar , Tanzima Hashem, A Novel Secret Sharing Approach for Privacy-Preserving Authenticated Disease Risk Queries in Genomic Databases. <i>In Proc. of 42nd IEEE International Conference on Computer Software and Applications. (COMPSAC 2018 acceptance rate was 24%)</i> .
RESEARCH EXPERIENCE	Undergraduate Thesis with Dr. Tanzima Hashem from July 2016 - September 2017 A Novel Secret Sharing Approach for Privacy-Preserving Authenticated Disease Risk Queries in Genomic Databases Security Threats in Cloud Computing with Legacy Operating Systems Paper Review in the field of Machine Learning
EDUCATION	2013 - 2017: B. Sc in Computer Science and Engineering Department of Computer Science and Engineering (CSE) Bangladesh University of Engineering and Technology (BUET), Dhaka, Bangladesh. CGPA: 3.54 (on a scale of 4.00) 2012: H.S.C (Science) Comilla Victoria Govt. College, Comilla, Bangladesh GPA: 5.00 (Out of 5.00) 2010: S.S.C (Science) Nawab Faizunnesa Govt. Girls High School, Comilla, Bangladesh GPA: 5.00 (Out of 5.00) Selected Courses: Artificial Intelligence, Machine Learning, Pattern Recognition, Computer Graphics, Digital Image Processing, Operating Systems, Concrete Mathematics
PROFESSIONAL EXPERIENCE	Junior Software Engineer at Reve Systems (October 2017 - April 2018) Lecturer, CSE at Northern University Bangladesh (May 2018 - Present)
SELECTED PROJECTS	Some of the selected projects are: Pocahontas, Online Exam System, CricZone, OpenEnd, Robo-Maid, Autonomous Location Tracker.

POCAHONTAS GAME (2014)	<p>Developed with C, using iGraphics</p> <ul style="list-style-type: none"> • Motivated by the main SEGA game Pocahontas • The player gained score by solving different tasks and thus harnessed power to go forward in the game
ONLINE EXAM SYSTEM (2014)	<p>Developed with Java</p> <ul style="list-style-type: none"> • Signing up, a user could sit for different written or MCQ exams • The verdict could be checked according to the marks
CRICZONE (2015)	<p>Database project</p> <ul style="list-style-type: none"> • Cricketing history, updates and rankings for all cricketing formats were available • Player profile, match venues and match statistics were also included
OPENEND (2016)	<p>An e-commerce site developed with Laravel</p> <ul style="list-style-type: none"> • Customers could find products from different vendors or companies • Customers could upload data of different products for selling purposes
ROBO-MAID (2016)	<p>Developed with ATmega32</p> <ul style="list-style-type: none"> • A robotic prototype: Bluetooth module was used for communication and manual operation purpose • IR proximity sensor was used for obstacle detection
AUTONOMOUS LOCATION TRACKER (2017)	<p>Developed with Raspberry Pi</p> <ul style="list-style-type: none"> • A robotic prototype was developed to find specified locations using color sensor • Used IR proximity sensor to avoid obstacles and HC05 Bluetooth module for communication and manual operation purpose
INTERNSHIP	<p>Internship at Microsoft, Bangladesh Business project on E-commerce Project name: Handy</p> <ul style="list-style-type: none"> • Proposed with a vision to make selling and buying easier for the customers and vendors, especially in the grass-root level • To establish communication between vendor and customer through third party involvement for product delivery

DEVELOPMENT
SPECIFICATIONS

- **Official Projects** Have worked on several projects e.g. a Russian project: BubbleTone (available at Google Play Store), contributed in UI and control design part of confide like feature of the application.
- **Design Patterns with Practical Usage** Command Design Pattern, Chain of Responsibility Design Pattern, State Design Pattern.
- **Performance Enhancing Tasks in Android** Code readability and maintainability enhancement, battery life optimization, APK size reduction, bitmap caching for better UI performance, data serialization issue and memory leak handling, using pool of worker threads.
- **Others** Bot, Retrofit and Google Place API, Firebase JobDispatcher and FCM incorporation.

ACHIEVEMENTS

First prize in extempore, Comilla Education Board, 2012
Best Debater Award, Comilla Education Board, 2012
Best Debater Award, National School Level Debate, 2010
Active President (2011), Interact District Organization-3280, Bangladesh.

COMPUTER
SKILLS

Language: C, C++, Java, Python, C#
Analysis Tool: MatLab
Development: Android
Database: Oracle, MySQL
Hardware: ATmega32 - Atmel Corporation, Raspberry Pi, Arduino Mega
Scripting: L^AT_EX, HTML, Prolog
Server-Side Scripting: PHP
Software Framework: Laravel
Computer Graphics: Adobe Photoshop, Adobe Illustrator, CorelDraw
Others: Microsoft Office (Word, Excel, Powerpoint)

COMMUNITY
SERVICES &
EXTRA
CURRICULAR
ACTIVITIES

President Elect for the year of 2010 and 2011, Interact Club of Comilla Mainamati
Charter President, Interact Club of Comilla City
Additional District Secretary, Rotary District Year 2011, Interact Level, Rotary District Organization-3280, Bangladesh
Debating, [Dancing](#), [Singing](#), Acting, Mimicry
Performing Artist, Murchhona, BUET
Membership: BUET Debating Club, BUET Entrepreneurship Club, Projonmo Debating Organization, Comilla

REFERENCE

Dr. S. M. Farhad

Associate Professor
Department of Computer Science and Engineering
Bangladesh University of Engineering and Technology, Dhaka - 1000, Bangladesh
E-mail: smfarhad@cse.buet.ac.bd
Website: <http://cse.buet.ac.bd/faculty/facdetail.php?id=smfarhad>

Dr. Tanzima Hashem

Professor
Department of Computer Science and Engineering
Bangladesh University of Engineering and Technology, Dhaka - 1000, Bangladesh
E-mail: tanzimahashem@cse.buet.ac.bd
Website: <http://cse.buet.ac.bd/faculty/facdetail.php?id=tanzimahashem>