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EDUCATION

- **Bangladesh University of Engineering and Technology**
Bachelor of Science in Computer Science and Engineering *July 2014*

PROFESSIONAL EXPERIENCE

- **Augmedix Inc.** Dhaka
Software Engineer *August 2017 - Present*
 - Augmedix provides *Google Glass* based solution to simplify how physicians in US healthcare system use EHRs. Involved in research and development of multimedia streaming feature of this solution using WebRTC protocol.
- **Mukto Software Limited** Dhaka
Senior Software Engineer *August 2016 - July 2017*
 - **Codemarshal:** Codemarshal is an e-learning platform currently focused on ICT education. Built a static source code analysis tool for C programming language as a part of intelligent code analysis technology of Codemarshal. The tool was built in *Node.js*.
- **Mukto Software Limited** Dhaka
Software Engineer *July 2014 - July 2016*
 - **National E-Learning Platform:** Project was for ICT division of Bangladesh government. Target was to provide a platform through which high school students can learn and practice programming effectively. Initially built the prototype of the project. *Express.js* framework of *Node.js* was used. Later designed, implemented and integrated a queue manager with it for code compilation. *Apache Kafka* was used as message queueing system.
 - **Hospital Information Management System:** Built an *OpenERP* accounts module customized for a hospital. *React.js* was used as front-end framework. Back-end communications were made through REST APIs, which were written using *Django* framework of *Python*.
 - **Meghdut:** Meghdut is a data analytics service. It provides visual insight of data depending on user defined KPIs. Initial development was done in Mukto Software Limited but later it became a separate company. Was part of a development team that built the prototype using *Sails.js* framework of *Node.js*.
 - **GSK Expert Automation System:** Project was to automate task management and data collection as well as provide analysis on collected data for Glaxo SmithKline Bangladesh. There were two parts of the project - a mobile application and a web application. Contribution was on the web application part which was developed using *Sails.js*. Developed an information extraction module which used to generate tag cloud from user feedback.
- **Code Testing Labs** Dhaka
Junior Software Developer *April 2012 - December 2013*
 - **Kernel space RTP data modification:** A Linux kernel module for mangling RTP packets in network layer. *Netfilter* was used to intercept network layer packets. At first RTP data mangling was done in application layer. Later it was moved to network layer to boost the performance.

PERSONAL PROJECTS

- **node-c-analyzer:** An open source Node.js module that analyzes C source codes and provides information like symbol table, call graph, statement lists etc.
- **node-c-parser:** Hand-written recursive-descent parser to parse C source codes and provide corresponding parse tree. An open source Node.js module. Test driven development(TDD) method was followed. Mocha.js was used as unit testing framework.
- **node-c-lexer:** Lexical analyzer to tokenize C source codes according to the token rules of C programming language. Also an open source node module and TDD was followed during development. Mocha.js was used to write the unit tests in this project too.
- **Parse-tree visualizer:** A small javascript project using D3.js to visualize the parse tree returned by node-c-parser. Later integrated into Codemarshal source code analysis tool.
- **db-wrapper:** A Node.js module that provides common interface to run some specific types of queries on MySQL, PostgreSQL and MSSQL Server.

SKILLS AND EXPERTISES

- **Languages:** Node.js, Python, C, C++, Java, SQL
- **Technologies:** Git, Apache Kafka, Scikit-learn, Express.js, Sails.js, React.js, Mocha.js, Django,
- **Methodologies:** Scrum, Test Driven Development, Pair Programming

PROGRAMMING CONTEST

- Solved 341 problems in UVa Online Judge.
- Codeforces rank *Specialist*, rating *1410*.
- Participated in two inter-university programming contests as member of teams from BUET.
 - Inter-University Programming Contest of BUET CSE Festival 2011(team name *BUET Packman*)
 - Quazi-Azher Ali National Programming Contest 2011 (team name *BUET Renaissance*)

EXTRA CURRICULAR AND VOLUNTEER ACTIVITIES

- Contribute to **Stackoverflow** every now and then. Current profile reputation 1654.
- Worked as exam paper scrutinizer of **Bangladesh Mathematical Olympiad Committee** from January 2009 to February 2010.
- Completed a few open online courses on **machine learning**.
 - *Machine Learning Foundations - A Case Study Approach*: Offered on Coursera, instructor Carlos Guestrin and Emily Fox.
 - *Machine Learning*: Offered on Coursera, instructor Andrew Ng.
 - *Social Network Analysis*: offered on Coursera, instructor Lada Adamic.
 - *Convolutional Network for Visual Recognition*: Course no CS231n of Stanford University, learned from Youtube contents and course page, instructor Fei Fei Li. (Currently Ongoing)

HONORS AND AWARDS

- Runner-up in inter-university artificial intelligence challenge organized as an event of BUET computer science and engineering festival 2013.
- Runner-up in intra-university programming contest organized as an event of BUET computer science and engineering festival 2011.
- One of 1186 members of bicycling group **BDCyclists** who set a new Guinness world record of longest single line of bicycles (moving).