Mehedi Hasan Masum

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EXPERIENCE

- **Software Engineer,** CodeMarshal IT Systems Limited, Feb 2018-Present

  - Front- and back-end engineering work on Ronangon platform. Developed a web based gaming environment with ReactJS, Redux and PixiJS. Implemented real time messaging backend from scratch with Django Channels
  - Co-authored the core REST architecture package for usage in different CodeMarshal products using Django Rest Framework

- **Research Assistant,** Robotics Lab, CSE, DU 2016-2018

  Front- and back-end engineering and Machine Learning R&D for building a graphically programmable robotics kit, funded by Ministry of Education, Govt. of Bangladesh.

VOLUNTEER EXPERIENCE

- **Executive member,** CSE-DU Students' Club, 2015-2016
- **Boy Scout,** Bangladesh Scouts Dhaka Metropolitan, 2005-2008

SKILLS

- **Key Concepts:** Data Structures & Algorithms, Object Oriented Programming, Artificial Intelligence
- **Competitive Programming:** Graph theory, Geometry (About 300 solves in OJs across different problem categories)
- **Languages:** Proficient in **Python, JavaScript with ES6,** very good command over **C++, Java**
- **Web Programming:** NodeJS, PHP, ReactJS-Redux and friends, jQuery
- **Database:** MySQL, PostgresSQL, GraphQL, NoSQL
- **Mobile Development:** Android SDK
- **Operating System:** MS Windows, Ubuntu
- **Misc.:** Git, AWS Solutions Architecture, Team leadership

EDUCATION

- **University of Dhaka, Dept. of CSE**
  Bachelor of Science in **Computer Science & Engineering,** 2018

  - CGPA: **3.81** (in scale of 4.0)
  - Position: **3**rd (among 60 students)
  - Received University Scholarship for academic excellence in 2014-15

- **Notre Dame College, Dhaka**
  Higher Secondary School Certificate**,** 2013

  - GPA: **5.0** (in scale of 5.0)
  - Education Board Scholarship in 2013 HSC examination (**15**th in national Talent Pool)

- **Ideal School and College, Dhaka**
  Secondary School Certificate, 2011

  - GPA: **5.0** (in scale of 5.0)

PUBLICATIONS

- **A framework for developing graphically programmable low-cost robotics kit for classroom education,** Proceedings of the 10th International Conference on Education Technology and Computers, Tokyo, Japan — October 26 - 28, 2018

  Publisher: ACM New York, NY, USA
  ISBN: 978-1-4503-6517-8
  doi>10.1145/3290511.3290535

HONORS

Competitive Programming

- Represented University of Dhaka in ACM-ICPC Asia Dhaka On Site Regional Contest (DU_Introspection), 2015

Software Competitions

- **Amazon** Life Hack Challenge: Best Student Software, 2018

- **Ford** Hack and Role Indore: Second Prize, 2017

- **Cisco** Spark Industry Challenge: Best Education Bot, 2017

- **Microsoft** Visual Studio Marketplace Hackfest: Best Mobile Application, 2016

- **Redhat** Code Healthy with OpenShift: Best Student Software, 2016

PROJECTS

Slack with Voice (Winner, Amazon Hackathon) | 2018

- Unofficial Amazon Alexa skill written in **NodeJS** that connects Slack workspace with Amazon Echo
- Implemented Account Linking for Echo users to connect to Slack and leveraged Slack API to send and receive messages

Bear (Winner, Cisco Hackathon) | 2017

- A **NodeJS** classroom bot that automates repetitive and time-consuming replies from the Professors using NLP and help professors conduct in-class poll and quiz
- Worked as **Full Stack** developer and made open source contribution in Howdy.ai **Botkit**

WiChat (Winner, Microsoft Hackathon) | 2016

- A Snapchat like **Android** application for sharing texts and doodles that connects nearby users by creating WiFi Hotspot
- Built a server-client based model from ground up using **Java** Socket & implemented bitmap caching for fast loading of Chatroom UI with large set of images

Apprise (Winner, Ford Hackathon) | 2017

- A Reddit like **Android** utility for sharing road safety issues to draw local authority's attention
- Worked as **Full Stack** developer, integrated Mapbox SDK and implemented lazy loading of safety flags on map

Overdrive (3rd Year SDP Project) | 2016

- A DropBox like file hosting and sharing utility intended for local networks (i.e. lab/classroom) built with **C++** and **POCO** Libraries
- Reduced response time by 15-20% by implementing AJAX based folder navigation in the frontend

LiveHealthy (Winner, Redhat Hackathon) | 2016

- A **PHP Web app** for Physicians to handle appointments & visualize health data synced across multiple devices of the patient. Pairs with a **mobile app** named *HealthPal* for patient.
- Worked as **Team Leader** and **Full Stack** developer, built a responsive web app and a major portion of the mobile app

REFERENCES

Dr. Saifuddin Md. Tareeq
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University of Dhaka
Director, Robotics Lab, CSE, DU
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