WORDH UL HASAN

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SUMMARY

Educated and motivated software engineer, quick to ramp up with any existing development platform and perform design, coding, debugging and testing application and system software. Excellent interpersonal as well as communication skills and enjoys a high-pressure team environment.

EDUCATION

North South University, Dhaka, Bangladesh
Bachelor of Science, Computer Science and Engineering, 2018
GPA: 3.14 on a scale of 4.0

Cambrian College, Dhaka, Bangladesh
Higher Secondary School, Science, 2013
GPA: 5.00 on a scale of 5.00

Monipur High School, Dhaka, Bangladesh
Secondary School, Science, 2011
GPA: 4.75 on a scale of 5.00

TECHNICAL SKILLS

- **Software** - VisualStudio, MS Office, Adobe Illustrator, Android Studio, InteliJ, PyCharm, Postman
- **Functional Skills** - Software Architecture, Object Oriented Programming, E-Commerce, Systems Integration, Integrated Circuit Design, Serverless Architecture, AWS, Microservices, Web Services.
- **Technical Skills** - C, C++, Python, noSQL, Java, XML, HTML, CSS,
- **Hardware Skills** - Raspberry Pi, Arduino, Analog Circuits, Digital Circuits.
- **Frameworks -** Django, Bootstrap, Spring Boot, Angular, Vue JS,

EXPERIENCE

Engineer, Solution Engineering (August 2019 – Present)
Software Engineer, Research & Development (Feb 2019 – August 2019
bKash Limited.

- Developed and maintaining a movie ticket purchasing web app for bKash Customer App.
- Visa Credit Card Bill Payment
- Subscription Based payment platform
- Maintenance and Feature development of Bkash Payment Gateway.
- Integration of Payment Gateway for multiple clients for multiple platforms such as Android, Django, WordPress Plugin and PHP.
- System and Architecture Design.
- Solution Design for software systems.
- Troubleshooting and root cause analysis of bKash application system and provide a recovery solution within SLA
- API related integrations

Worked on the following projects:

- Tourist Spot Recommendation System Using Fuzzy Inference System
- Smart Patient Monitoring System
- Design and Implementation of an IOT based Monitoring System for Inland Vessels using Multiple Sensors Network
- Exploring Challenges and Solution Approaches Regarding Wellbeing of Female Rohingya Community in Bangladesh

- IOT Based Question Paper Delivery Box: A Solution towards Preventing Question Paper Leakage in Public Exams of Bangladesh
- Smart Fridge an IOT Approach to update fridge inventory
- Line Maze Solving Robot
- Line Follower with PID Controllers
- IOT Based Greenhouse Automation System
- Bangla Hate Speech Detection Using Artificial Neural Networks

ACTIVITIES AND AWARDS

Awarded Best Presenter, 2018 2nd Borneo International Conference on Applied Mathematics and Engineering (BICAME), Balikpapan, Indonesia.
Awarded Best Speaker, IEEE Day 2018, Tech Talks.
Travel Grant- IEEE Region 10 SYWL Congress, Bali, Indonesia, 2018 by IEEE R10 Computer Society
2nd Place Living in the future Challenge- IEEE Region 10 SYWL Congress, Bali, Indonesia, 2018
Placed 3rd in 'Low Cost Robot Design Challenge held at North South University organized by the Robotics & Automation Society, IEEE NSU Student Branch
Awarded Best (Humanitarian) Student Volunteer- IEEE Bangladesh Section 2017
Awarded President Scout's Award- Bangladesh Scouts 2009

Elected as Humanitarian Activity Coordinator for year 2019 by IEEE Young Professionals Bangladesh
Elected as Chair for year 2017 by IEEE NSU Student Branch
Elected as Vice-Chair for year 2016 by IEEE NSU Student Branch

Served as the Event Coordinator of Educational Activities Committee, IEEE Bangladesh Section 2018
Served as the Content Writer of Student Activities Committee, IEEE Bangladesh Section 2017
Served as the Graphics Designer of Humanitarian Activities Committee, IEEE Bangladesh Section 2017
Served as the Graphics Designer of Student Activities Committee, IEEE Bangladesh Section 2016

COURSEWORK

Operating Systems	Computer Networks	Machine Learning
Design & Analysis of Algorithms	Database & Soft Engineering	Embedded Systems Design
Neural Network	Artificial intelligence	Computer Architecture

CERTIFICATIONS & TRAINING

Natural Language Processing with Classification and Vector Spaces by deeplearning.ai on Coursera. Certificate earned at July 6, 2020

An Introduction to Programming the Internet of Things (IOT) by University of California, Irvine on Coursera. Certificate earned at July 3, 2020

Cybersecurity and the Internet of Things by University System of Georgia on Coursera, Certificate earned at June 17, 2020

AWS Fundamentals by Amazon Web Services on Coursera. Certificate earned at June 16, 2020

CSSLP- Certified Secure Software Lifecycle Professional Training by bKash. Certificate earned at March, 2020

Google Web Designer Basics, Certificate earned at March 2020

Anti-Money Laundering (AML CFT) training by bKash, Certificate earned at April 2019

Mobile Sites Certification by Google, Certificate earned at Feb 2018

ACTIVE MEMBERSHIP

Active member of the following organizations:

- IEEE Professional Member
- IEEE Computer Society
- IEEE Robotics & Automation Society
- ACM Professional Member
- ACM SIGCHI Member

TEST SCORES

IELTS: 7.5
Listening: 8.5 Reading: 8.0 Writing: 6.5 Speaking: 7.0 CERF Level: C1
GRE - 305 (Verbal - 150, Quant - 155, AWA - 3)

PUBLICATIONS

Kimia Tuz Zaman, Wordh Ul Hasan et all, "**Exploring Challenges and Solution Approaches Regarding Wellbeing of Female Rohingya Community in Bangladesh**" IEEE Region 10 Conference 2019 (TENCON), Kerala, India 2019

Abstract- The contemporary Rohingya crisis has forced more than half a million Rohingya refugees to flee and take shelter in Bangladesh and the worst sufferers of the incident are the women, children, and old aged refugees undoubtedly. They have fled the compunction to protect themselves from going through a long tedious migration to Bangladesh, which also includes pregnant women who have a high risk of giving birth and health safety concerns. These crises get deepened when they have to collect food competing with men, look after their children in the camps, and getting proper sanitation. But until the crisis gets solved permanently, through a qualitative study on around 117 female refugees currently living in the Refugee Camp this paper aims to unfold the mental health condition of the female refugees escaping from Rakhine State. We have proposed a technology solution so that manpower and equipment lacking can be compensated. Our findings are mostly concentrated on designing the mental health solution for the traumatized women who had to encounter their beloved ones being oppressed. We have examined them through the lens of Human-Computer Interaction (HCI) research principle and stepped towards suggesting a technology intervention to enhance their current mental state

Kimia Tuz Zaman, Wordh Ul Hasan et all, "**IOT Based Question Paper Delivery Box: A Solution towards Preventing Question Paper Leakage in Public Exams of Bangladesh**" 6th International Conference on Smart Instrumentation, Measurement and Application (ICSIMA), Kualalampur, Malaysia, 2019

Abstract- A possible low-cost solution to prevent the question paper leakage in public exams of Bangladesh has been illustrated in this paper. A GSM based multi-node security system has been designed for delivering the questions to different centers. However, this system can also serve the purpose of delivering other important or confidential deliveries as well. An Arduino Mega micro-controller has been used to control the hardware devices of the system. IR Proximity Sensor, Light Dependent Resistors and Laser Lights have been used to build the prototype sensors for the security system of the devices. GSM Module has been used to send notification of any unusual or suspicious activities during the delivery period via SMS using mobile network to the particular authority. The SMS is then forwarded and illustrated in the admin portal built as a web app. The architecture of the system has been designed to keep costs low. This system aims to ensure the maximum minimization of question paper leakage during the delivery period to the exam centers.

Wordh Ul Hasan, Mohammad Sultan Khaja et all, "**Wireless Health Monitoring System**" 2nd Borneo International Conference on Applied Mathematics and Engineering (BICAME), 2018, Balikpapan, Indonesia, 978-1-5386-7724-7

Abstract- In Bangladesh many rural areas have as little as one clinic to help the people. This project aims to help those with chronic diseases that prolong with aging. This approach is made by taking basic determinants such as SPO2, ECG, NIBP & temperatures wirelessly transfer them to an online server. These data can be observed by doctors/caretakers at real time from any location being connected online. The samples of data are acted upon to

determine irregularities of the health conditions of the patient in rest which are stored on the server every second. Doctors have access to the server through a web application which enables them to analyses the data. A wireless health monitoring system has been developed to solve this problem, for which an Android and a Web Application was implemented.

Hasib Zunair, Wordh Ul Hasan et all, "**Design and Implementation of an IOT based Monitoring System for Inland Vessels using Multiple Sensors Network**" 2nd International Conference on Smart Sensors and Applications (ICSSA 2018), 2018, Kuching, Malaysia

Abstract- Multi sensor networks are now widely used in various security and surveillance applications. The paper includes designing and implementing a wireless sensor network with a real time web application for monitoring multiple ships to prevent catastrophic events due to overloading. The idea consists of four main parts: Detection Module, GPS tracker, communication system (NRF24L01+) and software application for web interface.

Haymontee Khan, Noel Mannan et all, "**Tourist Spot Recommendation System Using Fuzzy Inference System**" 13th International Conference on Natural Computation, Fuzzy Systems and Knowledge Discovery (ICNC-FSKD 2017), Guilin, China, 2017, 978-1-5386-2165

Abstract- A fuzzy logic-based recommender system is proposed in this research that uses Fuzzy Inference System (FIS) to recommend tourist spots to travelers. The system keeps a database containing tourist locations and their respective information as well as some specific data which is used as parameters for the inference system. The system prompts user to give their desired location type(s) that they wish to visit, their budget, the number of people going on the trip, and other defined parameters which are used in the inference system. We have decided to limit the compound location type to two for simplicity of the calculation. Besides, a tourist is not normally interested in more than two location types. In addition to that, we will suggest the user some other places of different types around the selected locations which they may wish to visit during their stay. Once the input is taken, the system will fetch corresponding data from the database, fuzzify the metadata and pass it to the fuzzy recommendation engine. The recommendation engine will calculate and assign a crisp value to each location as an output. Then the list is sorted in a descending order and the top locations that satisfy most of the user's defined preferences are recommended to the user.