TAOSEEF ISHTIAK

📞 **+8801751651320**
✉ taoseef.ishtiak@northsouth.edu   🐙 https://github.com/taoseefishtiak
🖳 https://taoseefishtiak.github.io   in https://www.linkedin.com/in/taoseef-ishtiak-32093ab7
📍 Address: Block- C, Road No. 04, House No. 26, Banasree, Rampura, Dhaka-1219, Bangladesh.

Career Objective

I have the aim to engage myself in the software industry to build a career as a full-stack software engineer.

Personal Statement

As a recent award-winning graduate, completing B.S. in Computer Science and Engineering, I am currently seeking an excellent institution/team to build my career in full-stack software development along with learning deeper knowledge through building advanced web/mobile applications. Also, I am fond of learning and working in the domains of Algorithms, Computer Vision, Machine Learning, and Data Mining related developments. With the experience of being a Sub-Executive body member of one of the most prestigious international student chapters in the Computing Association, I have gained my opportunity to get involved in core software development, research activities, leadership, and organizational skills. My academic studies, projects, and research work have greatly strengthened my analytical skills. I am confident to share and apply my knowledge and skills to develop advanced applications in the coming days and to face my professional challenges; making personal development in the process. Through my engagement in educational, co-curricular, and social activities, I have developed strong communication, collaboration, management, and interpersonal skills; which make me a confident team guy.

Technical Skills

Expertise
Back-End/Full-stack web, and android development

Programming and Query Languages
Python, Java, C++, Dart, JavaScript, R, PHP, SQL, MongoDB

Frameworks, Libraries and Tools
Node.js with Express, Laravel, OpenCV, Flutter, TensorFlow, PyTorch, Django, JavaFX with Maven, Tableau.

Utilities
Git, PostgreSQL, Google Colab

Other IT Expertise
MS Office, Adobe Illustrator, Adobe Photoshop

Language and Communication
Fluent in Reading, Speaking, and Writing in English and Bengali

Interests
Algorithms, Software Engineering, Computer Vision, Machine Learning, and Data Mining.

Hobby
Traveling, Reading Books.

Education and Qualifications

2016 - 2019

B.S. Computer Science and Engineering | North South University
- **CGPA 3.79.**
- Recipient of **Magna Cum Laude Award** for academic performance.
- Awarded the **"Champion of Innovation Challenge Season- 8"** for best undergraduate Senior Design Capstone and thesis project.

2013 - 2015

Higher Secondary School Certificate | Notre Dame College, Dhaka.
- **GPA 5.00**

2013

Secondary School Certificate | Ideal School and College.
- **GPA 5.00**

Work Experience

January, 2020 – Present	**Lab Instructor	Department of ECE, North South University.**
December, 2017 – Present	**Research Assistant	Department of ECE, North South University.**
January, 2019 – December, 2019	**Teaching Assistant at North South University for the courses: Java Programming Language, Data Structure, and Design and Implementation of Algorithms.**
May, 2018 – Present	**Member of R&D, NSU ACM Students Chapter.**
September, 2019 - Present	**Machine Learning workshop instructor of IEEE NSU Student Branch.**
October, 2018 – November, 2019	**Sub-Executive NSU ACM Students Chapter- Team: Logistics and Administration.**
March, 2017 – November, 2018	**Front end developer at Doctorbaari . (https://doctorbaari.com).**

Awards and Achievements

1. **Champion in North South University Innovation Challenge Season 8: Senior Design Capstone Thesis Project Showcasing.**
   Project: "A Complete Road Health Monitoring System for Bangladesh".
2. **Merit-based Waiver Awardee.**
   100% tuition waiver recipient based on Academic Performance at North South University.
3. **2nd Runner of Up IEEE Day Hackathon, 2017.**
   Project: "IoT-based An advanced application to decrease household electricity consumption based on weather information."
4. **2nd Runner Up of NSU Intra University Line Follower Robot Competition Summer 2017.**
5. **Board Scholarship (General Category) Awardee.**
   Higher Secondary School Certificate Examination, 2015.
6. **Board Scholarship (Talent-pool Category)**
   Secondary School Certificate Examination, 2013.
7. Various achievements in scientific project development, extempore speech; Math, and Biology Olympiad competitions during Secondary and Higher Secondary School.

Event Organizing

1. Technovation 2.0 | 2019.
2. BACS High School Programming Contest | 2018.
3. NSU ACM Inter University Girls' Programming Contest | 2018.
4. Hour of Code by NSU ACM Student Chapter. | 2018
5. Technovation | 2018.
6. Notre Dame Annual Science Festival 2015 and 25th GKC.
7. BAS National Science Olympiad. | 2015
8. 35th National Science and Technology Week. | 2014
9. Notre Dame Annual Science Festival 2014 and 24th GKC.

N.B. The next page contains brief description of some of my projects and academic work.

Projects & Research

01. Journal Article: Jakariya, M., Alam, M. S., Rahman, M. A., Ahmed, S., Elahi, M. L., Khan, A. M. S., Saad S., Tamim H. M., Ishtiak T., Sayem S. M., & Ali, M. S. (2020). Assessing climate-induced agricultural vulnerable coastal communities of Bangladesh using machine learning techniques*. Science of The Total Environment, 140255.*

02. Conference Paper: *Indexed by Scopus:* T. Ishtiak,, S. Ahmed, M.H. Anila, S. Islam, R. Shelim, T. Farah, "Road state classification of Bangladesh with convolutional neural network approach", *(2019) WMSCI 2019 - 23rd World Multi-Conference on Systemics, Cybernetics and Informatics, Proceedings, 4, pp. 129-134.*

03. Journal Article: *S. Ahmed, T. Ishtiak, A. U. R. C Suhan, M.H. Anila, T. Farah, "Road state classification of Bangladesh with convolutional neural network approach", (2019) Journal of Systemics, Cybernetics and Informatics: JSCI, Volume 17 - Number 4 (extended version for journal publication).*

04. Conference Paper: T. Ishtiak, S. Ahmed, M. H. Anila and T. Farah, "A Convolutional Neural Network Approach for Road Anomalies Detection in Bangladesh with Image Thresholding", *2019 Third World Conference on Smart Trends in Systems Security and Sustainability (WorldS4), London, United Kingdom, 2019, pp. 376-382. doi: 10.1109/WorldS4.2019.8903936.*

05. Conference Paper: S. Rezwan et al., "A Minimalist Model of IoT based Sensor System for Sewage Treatment Plant Monitoring", *2019 IEEE 10th Annual Information Technology, Electronics and Mobile Communication Conference (IEMCON), Vancouver, BC, Canada, 2019, pp. 0939-0945. doi: 10.1109/IEMCON.2019.8936182.*

06. Designing an algorithm to detect the number of cracks on a road surface and estimating the surface condition of road with projection in Google Map, from smartphone linear accelerometer and gyroscope.

07. Implementation of **UNet++: A Nested U-Net Architecture for Medical Image Segmentation, introduced by Z. Zhou, M. M. R. Siddiquee, N. Tajbakhsh, and J. Liang arXiv:1807.10165v1 [cs.CV] 18 Jul 2018,** on KITS 2019 Kidney and Kidney Tumor Segmentation Challenge**.**

08. Feature Engineering and applying tree-based data mining techniques "Human Activity Recognition from Continuous Ambient Sensor" dataset available at University of California Irvine Machine Learning Repository. Based on this project outcome a Conference paper has been submitted and currently under review.

09. "Groupee"- a web application built with Node.js and Express to maintain team management and group tasks.

10. Web and Backend system development for Sewage Treatment Plant Monitoring of North South University.

11. Full Stack Android and Web Application development for Coastal Disaster Vulnerability Data Collection of Bangladesh.

12. Conference Paper: T. Ishtiak, R. M. Orpon, N. Mashnoor, M. Ahmed and M. A. Nazim, "An advanced application to decrease household power consumption and save energy detecting the weather condition," *2017 8th IEEE Annual Information Technology, Electronics and Mobile Communication Conference (IEMCON), Vancouver, BC, 2017, pp. 622-627. doi: 10.1109/IEMCON.2017.8117168.*

13. Front End development of Android Application for **Doctorbaari,** https://doctorbaari.com.

14. An IoT based device to calculate electricity consumption and sending data to server automatically.

15. Ekota- The social defender: back-end PHP development.

16. Bus Ticket Booking System based on: JavaFX Maven Framework.

17. Rest API-sbased Weather Information: Web Application based on: JavaFX Maven Framework.

18. IoT-based online Environment Data Logger and automatic alarm system for disaster management and industrial usage.