MD. NAZMUDDOHA ANSARY

Senior Researcher (Deep Learning) Royal It Limited, Dhaka, Bangladesh

Email: <u>nazmuddoha.ansary.28@gmail.com</u>
Office: <u>nazmuddoha.ansary@royalitltd.com.bd</u>

Skype: <u>Live:nazmuddoha.ansary.28</u> Github: <u>https://github.com/mnansary</u>

Orcid: https://orcid.org/0000-0002-8087-6189

Mobile: +8801786044716



EXPERIENCE

Senior Researcher (Deep Learning)
 Royal It Limited, Dhaka, Bangladesh (May 2019 – present)

• Research Engineer (Data Science)
Royal It Limited, Dhaka, Bangladesh (November 2018 – April 2019)

Research Assistant (RA)
 Laboratoire d'Etudes en Géophysique et Océanographie Spatiales
 (LEGOS), France (July 2018 – October 2018)

R&D Software Engineer
 Celltron LTD, Dhaka, Bangladesh(May 2017 – December 2017)

EDUCATION

Degree	Institution	Result
S.S.C	Govt. Laboratory High School, Rajshahi	G.P.A- 5.00/5.00
H.S.C	Govt. New Degree College, Rajshahi	G.P.A- 5.00/5.00
B.Sc (EEE)	BUET	C.G.P.A- 3.20/4.00

PUBLICATIONS

High Resolution Intertidal Topography from Sentinel-2 Multi-Spectral
 Imagery: Synergy between Remote Sensing and Numerical Modelling

Md Jamal Uddin Khan , *Nazmuddoha Ansary* , Fabien Durand , Laurent Testut , Marufa Ishaque, Stéphane Calmant , Yann Krien , A.K.M. Saifullslam , Fabrice Papa .

Remote Sensing. 2019; 11(24):2888. (Impact Factor - 4.118)

- Paper Link: https://www.mdpi.com/2072-4292/11/24/2888
- **Funding:** This research was funded by **CNES (French Govt. Space Agency)** through the **"BANDINO" TOSCA** grant.

Personal Contribution: Module Development For Shoreline Extraction Algorithm (Link: <u>GITHUB</u>)

• A Sweet Recipe for Consolidated Vulnerabilities: Attacking a Live Website by Harnessing a Killer Combination of Vulnerabilities for Greater Harm.



Mazharul Islam, <u>Md.Nazmuddoha Ansary</u>, Novia Nurain, Salahuddin Parvez Shams and A. B. M. Alim Al Islam

- Paper Link: <u>10.1109/NSvsS.2018.8631373</u>

• Analysis of Modular Multilevel Converter Based Solid State Transformer Implementing Hybrid Control.

Rajesh Paul, Nazmuddoha Ansary, Abdur Rokib, Irrtisum Khan and Shamim Reza.

- Paper Link: 10.1109/ICECE.2018.8636742

Personal Contribution: MATLAB Implementation of the algorithm (Link: GITHUB)

• Intertidal digital elevation model (DEM) of CHITTAGONG using high-resolution SENTINEL 2 imagery and tidal model. (IN PRESS)

Nazmoddoha Ansary, Md. Jamal Uddin Khan, Fabien Durand, A.K.M. Saiful Islam.

- At \mathcal{T}^{th} International Conference on Water and Flood Management-ICWFM 2019
- Funding: CNES, French Embassy, Dhaka.

PersonalContribution: Satellite Image Processing, Python Module development(Link:GITHUB)

• R3Diver: Remote robotic rescue diver for rapid underwater search and rescue operation.

Fattah, S.A, Abedin, F, <u>Ansary, M.N</u>, Rokib, M.A, Saha, N, & Shahnaz, C.

- Paper Link: 10.1109/TENCON.2016.7848658)

Personal Contribution: Arduino UNO programming (C/C++) of the ROV control

• Particle Size Analysis by Image processing Technique.

Khaled M. Ehsan, Md. Raquibul Hossain, Tanvir Manzur, *Ansary Shohag*, Nazifa Tabassum.

- Paper Link: Paper Link)

Personal Contribution: Implementation of the algorithm in MATLAB (Link: GITHUB)

PROJECTS

MACHINE LEARNING AND IMAGE PROCESSING

- HandWritten Bangla Character Recognition (Link: H-OCR)
- Sentinel-2 Satellite Data Handling Library (Link:SATLIB)
- TPU-keras BusterNet for Image forgery Detection (Link:BusterNET TPU)
- Classification Of Skin Disease (Link: pySKIND)
- Quantum Image Representation With BitString Compression for Binary Images on IBM Q Experience (Link:pyQIBM)
- Hand Activity Recognition with C3D and LRCN (Link:pyACTRECOG)

ON GOING

- Water level modeling for flood forecasting based on BMD provided rainfall data
 with Recurrent Neural Networks. <u>Nazmuddoha Ansary</u>, Md Jamal Uddin Khan, Dr. Mohan
 Kumar Das .(Link:GITHUB) Currently Being Communicated For A Journal
- Forged Image To Natural Image reconstruction: Analysis of GAN architectures in the context of image reconstruction. Shakir Hossain, Nazmuddoha Ansary. Shahriar Prince, Mohammad Bin Monjil. (Link:GITHUB) - Currently Being Communicated for A Conference

COMPUTER SECURITY

- Binary Hacking Training Presentation: (Link: <u>Binary Exploitation Basics</u>) Topics:
 - Bypassing a password checking binary
 - Ways to know the actual password
 - REVERSE ENGINEERING, KEYGEN, PARSER DIFFERENTIAL, and more
- .hta (CVE-2017-0199 and CVE-2017-8570) and VBA-Script vulnerability binary assessment for evading virus definitions on MS-WORD and MS-POWERPOINT exploiting OLE (Object Linking and Embedding) vulnerabilities in MS-OFFICE 2016. (Valid Till-2017 December)
- Improvised Technique with SSLSTRIP, dns2proxy, and ARP spoofing for getting HTTPS data in the local Wi-Fi-network (Valid Till-2017 October)

ACADEMIC GROUP PROJECTS

- Speech Recognition with MFCC feature extraction (MATLAB).
- Heart Rate Monitoring and health evaluation (MATLAB, Arduino).
- Highway Vehicle tracking and counting via live video feed and comparing efficiency between Matlab Computer Vision and Python OpenCV
- DLD project on the digital clock

COMPUTER SKILLS

Programming Languages:

Python:

- Specialties : TensorFlow,Keras,sklearn,OpenCV,pandas,GDAL

- Familiar with : Django,facebook-SDK

MATLAB:

- Specialties : Simulink, Computer Vision toolbox

• C/C++:

- Specialties : Network programming

• Familiar with : Java,C#, Javascript (electron,node.js)

Operating systems:

Proficient in : Ubuntu, Kali Linux, Windows

Familiar with : Jessie (Raspbian), Zorin OS, Fedora

Tools and Programs:

Text : Microsoft Office, LibreOffice,LATEX

Disassemblers : *gdb,radare2*Exploitation Frameworks : *BEEF, Metasploit*

Network Analysis Tools : Wireshark, sslstrip, Fluxion

Vulnerability Scanners : Nikto, Nmap, NetSparker, Burp Suite

REFERENCES

• Dr. A. B. M. Alim Al Islam

Associate Professor, Department of Computer Science and Engineering, Bangladesh University of Engineering and Technology (BUET) alim_razi@cse.buet.ac.bd

• Dr. Md. Shamim Reza

Associate Professor, Department of Electrical and Electronic Engineering, Bangladesh University of Engineering and Technology (BUET) shamim_reza@eee.buet.ac.bd

• Dr. Fabien Durand

Charge de Recherche, LEGOS, Institut de Recherche pour le Développement. fabien.durand@ird.fr