MD. NAZMUDDOHA ANSARY

Senior Researcher (Deep Learning)
Royal It Limited, Dhaka, Bangladesh
Email : nazmuddoha.ansary.28@gmail.com
Office : nazmuddoha.ansary@royalitltd.com.bd
Skype : Live:nazmuddoha.ansary.28
Github : https://github.com/mnansary
Orcid   : https://orcid.org/0000-0002-8087-6189
Mobile : +8801786044716

EXPERIENCE

- **Senior Researcher (Deep Learning)**
  Royal It Limited, Dhaka, Bangladesh (*May 2019 – present*)
- **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*)
- **Researcher (Academic): Satellite Data Processing and Machine Learning**
  In association with: IWFM and Dept. of CSE, BUET, Dhaka, Bangladesh (*November 2018 – April 2019*)

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:GITHUB)

- ***A Sweet Recipe for Consolidated Vulnerabilities: Attacking a Live Website by Harnessing a Killer Combination of Vulnerabilities for Greater Harm.***
  Mazharul Islam, *Md.Nazmuddoha Ansary*, Novia Nurain, Salahuddin Parvez Shams and A. B. M. Alim Al Islam.
    - Paper Link: 10.1109/NSysS.2018.8631373

  Personal Contribution: The exploitation and security evaluation of the Govt. website (http://teacher.xxxx.xx.xx) mentioned in the paper

- ***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 7th ***International Conference on Water and Flood Management-ICWFM 2019***
    - Funding: CNES, French Embassy, Dhaka.

  PersonalContribution: Satellite Image Processing, Python Module development

- ***R3Diver: Remote robotic rescue diver for rapid underwater search and rescue operation.***
  Fattah,S.A,Abedin,F,*Ansary,M.N*,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)

ON GOING

- ***Water level modeling for flood forecasting based on BMD provided rainfall data with Recurrent Neural Networks.***

  Nazmuddoha Ansary, Md Jamal Uddin Khan, Dr. Mohan Kumar Das .

  (Link:GITHUB) - Currently Being Communicated

- ***Forged Image To Natural Image reconstruction: Analysis of GAN architectures in the context of image reconstruction .***

  Nazmuddoha Ansary, Shakir Hossain, Shahriar Prince, Mohammad Bin Monjil .

  (Link:GITHUB) - Currently Being Communicated

PROJECTS

<u>MACHINE LEARNING AND IMAGE PROCESSING</u>

- HandWritten Bangla Character Recognition Using Advanced Convolutional Neural Networks (Link:[DenseNet Implementation: 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](#))

<u>COMPUTER SECURITY</u>

- Binary Hacking Training Presentation: (Link:[Binary Exploitation Basics](#)) Topics:
  - Bypassing a password checking binary
  - Ways to know the actual password
  - REVERSE ENGINEERING, KEYGEN,PARSER DIFFERENTIAL, and many 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*

<u>ACADEMIC GROUP PROJECTS</u>

- 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