# Kazi Saeed Alam

Erasmus Mundus Joint Master Degree in Medical Imaging and Applications Email: saeed.utsha@gmail.com



## RESEARCH INTEREST

Medical Imaging, Deep Learning, Computer Vision, Natural Language Processing.

## **EDUCATION**

MSc (Thesis), Imperial College London, Erasmus Mundus Joint Master Degree, Medical Imaging and Applications (MAIA)

September, 2021-September, 2023

Khulna University of Engineering & Technology (KUET)

Bachelor of Science in Computer Science and Engineering

**Overall CGPA**: **3.95** (out of 4.00)

Class rank: 1st /61

Khulna, Bangladesh 2015-2019

## LANGUAGE PROFICIENCY

• Bengali: Native

• English: **Fluent** (**IELTS** Test Score: **Overall 7.5** (Reading **8.5**, Listening **8.5**, Speaking **7.0**, Writing **6.5**)

23 November, 2020

## SELECTED ACADEMIC PROJECTS

Projects So far during MAIA master's: all projects can be found here

- > Temporal Image Registration using deep learning for 3D Fetal Echocardiography (MSc Thesis at Imperial College London, UK)
- ➤ Deep learning based Colorectal Lesions Segmentation (Internship Project at Encov, Institute Pascal, France)
- ➤ Automatic Skin Lesion Segmentation and Classification with traditional and deep learning approaches (AIA-ML-DL academic Project)
- **Brain MRI tissue segmentation** (Medical Image Segmentation and Applications Final Project)
- > Chest CT volumes registration (Medical Images Registration and Applications Final Project)
- ➤ An efficient hybrid method for retinal blood vessel segmentation in eye fundus images (Image Processing academic Project)
- ➤ Classification challenge on Alzheimer's Disease using MRIs and Gene Expression data (Statistical learning and Data Mining academic Project, Language: R)
- ➤ Efficient Partitioning Algorithm for Parallel Multidimensional Matrix Operations by Linearization (Undergrad thesis at KUET)
- > Computer Vision based Lane Detection (System Development Undergrad Project)

## **Publications:** all publications can be found here

- Md. Asiful Islam Miah, Shourin Paul, Md. Ahsan Habib, **Kazi Saeed Alam**, "Predicting Brain Age Using Lightweight 3D CNN Architecture from T1-Weighted MRI Images." Innovations in Electrical and Electronics Engineering, edited by Akhtar Kalam et al., Springer Nature Singapore, 2025, pp. 153–165.
- Arifur Rahman, Shahriar Parvej, Kazi Saeed Alam, H M Abdul Fattah, "Optimizing SMS Spam Detection: Comparative Analysis of Hybrid Voting Ensembles and Bi-LSTM Networks with Stratified Cross-Validation". 2024 5th International Conference on Data Intelligence and Cognitive Informatics (ICDICI), 2024, pp. 1030–1035, https://doi.org/10.1109/ICDICI62993.2024.10810777.
- Md. Nazmul Haque, A. A. M. Ashfaqul Adel, Kazi Saeed Alam, "Deep Learning Techniques in Cyclone Detection with Cyclone Eye Localization Based on Satellite Images.", Proceedings of the International Conference on Big Data, IoT, and Machine Learning, Lecture Notes on Data Engineering and Communications Technologies, vol 95. Springer, Singapore
- Md. Jahid Hasan, SK Nahid Hasan, Kazi Saeed Alam, "Deep Convolutional Neural Network based Bangla Sign Language Detection on a Novel Dataset." Proceedings of the International Conference on Machine Intelligence & Data Science Applications (MIDAS 2021), Lecture Notes on Data Engineering and Communications Technologies, Springer, Singapore
- ➤ Kazi Saeed Alam, Shovan Bhowmik, Priyo Ranjan Kundu Prosun, "Cyber Bullying Detection: An Ensemble Based Machine Learning Approach.", Proceedings of the 3rd International Conference on Intelligent Communication Technologies and Virtual Mobile Networks (ICICV 2021), IEEE, Tirunelveli, India
- ➤ Priyo Ranjan Kundu Prosun, **Kazi Saeed Alam** and Shovan Bhowmik, "**Improved Spam Email Filtering Architecture Using Several Feature Extraction Techniques.**", Proceedings of the International Conference on Big Data, IoT, and Machine Learning, Lecture Notes on Data Engineering and Communications Technologies, vol 95. Springer, Singapore
- Shovan Bhowmik, Priyo Ranjan Kundu Prosun, Kazi Saeed Alam, "A Novel Three- Level Voting Model for Detecting Misleading Information on COVID-19.", 6th International Conference on Emerging Applications of Information Technology (EAIT 2020), Lecture Notes in Networks and Systems, Springer.
- SK Nahid Hasan, Md. Jahid Hasan, **Kazi Saeed Alam**, "**Shongket: A Comprehensive and Multipurpose Dataset for Bangla Sign Language Detection.**", 2021 International Conference on Electronics, Communications and Information Technology (ICECIT), Khulna, Bangladesh, 2021, pp. 1-4, IEEE
- Samin Yasar, Md. Mahfuzul Haque Gazi, **Kazi Saeed Alam**, "Multi-level Voting Models in Cyber Aggression Detection for Bangla Texts." Proceedings of the International Conference on Big Data, IoT, and Machine Learning, Applied Informatics for Industry 4.0 published, Taylor & Francis.
- ➤ Iftekher Toufique Imam, Yamin Arafat, **Kazi Saeed Alam** and Shaikh Akib Shahriyar, "**DOC-BLOCK: A Blockchain Based Authentication System for Digital Documents.**", Proceedings of the 3rd International Conference on Intelligent Communication Technologies and Virtual Mobile Networks (ICICV 2021), IEEE, Tirunelveli, India
- ➤ Kazi Saeed Alam, Tanvir Ahmed Shishir, K M Azharul Hasan, "Efficient Partitioning Algorithm for Parallel Multidimensional Matrix Operations by Linearization.", Information and Communication Technology for Intelligent Systems. ICTIS 2020. Smart Innovation, Systems and Technologies, vol 195. Springer, Singapore.
- ➤ Md. Rezwanul Haque, Md. Milon Islam, **Kazi Saeed Alam**, Hasib Iqbal, Md. Ebrahim Shaik, "**A Computer Vision based Lane Detection Approach.**", *International Journal of Image*, *Graphics and Signal Processing* (*IJIGSP*), Vol.11, No.3, pp. 27-34, 2019. DOI: 10.5815/ijigsp.2019.03.04

#### **EXPERIENCE AND ACTIVITIES**

- > Assistant Professor, Dept. of Computer Science and Engineering, Khulna University of Engineering & Technology (KUET), Khulna, Bangladesh (02 Dec, 2023 Present)
- ➤ **Lecturer**, Dept. of Computer Science and Engineering, Khulna University of Engineering & Technology (**KUET**), Khulna, Bangladesh (20 Aug, 2019 02 Dec, 2023)

- Lecturer, Dept. of Computer Science and Engineering, BRAC University, Dhaka, Bangladesh (14 May, 2019 19 Aug, 2019)
- ➤ Research Intern, Endoscopy and Computer Vision Lab, Institut Pascal, Université Clermont Auvergne, France (July-September, 2022)

# • Courses Taught So Far:

# **Theory Courses**

Artificial Intelligence
Image Processing and Computer Vision
Programming Techniques (C, C++)
Database Systems
Computer Networks
Computer Graphics

## **Sessional Courses**

Advanced Programming
Web Programming
Data Structures & Algorithms Laboratory
Operating Systems Laboratory
Computer Networks Laboratory
Computer Graphics Laboratory

## AWARDS AND CERTIFICATIONS

- Erasmus Mundus Scholarship for Joint Master Medical Imaging and Applications (2021-2023)
- Participation Grant, 16<sup>th</sup> EXCITE Zurich Summer School on Biomedical Imaging, University and ETH Zurich (5-16 September, 2022)
- University gold medalist for securing 1<sup>st</sup> position in the graduating class
- Named to the Dean's list for scholastic achievement, Khulna University of Engineering & Technology, 2015-2019
- **Merit Scholarship** for securing position among top 10% students, Khulna University of Engineering & Technology, 2015-19

## TECHNICAL SKILL

Programming : Python, C, C++, Java, R, MATLAB, PHP

Data analysis : Pytorch, Scikit-learn, Pillow, Tensorflow, Keras

Data visualization : Simple ITK, Matplotlib, Excel

Web and Mobile Development : Android, Swift, Spring Boot, Laravel, Flask, ReactJS, Bootstrap

Database Management : MySQL, SQLite, PostgreSQL

Operating system : Windows, Linux

Version Control : Git

Hands-on : LaTeX, Cisco Packet Tracer, OpenCV, OpenGL

## REFERENCES

# Dr. Choon Hwai Yap

Senior Lecturer,

Department of Bioengineering Imperial College London

Email: c.yap@imperial.ac.uk

## Prof. Dr. K.M. Azharul Hasan

Department of Computer Science & Engineering Khulna University of Engineering & Technology Khulna-9203, Bangladesh.

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