

Kazi Saeed Alam

Erasmus Mundus Joint Master Degree in Medical Imaging and Applications

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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)

RESEARCH WORK

Publications: *all publications can be found here*

- Md. Nazmul Haque, A. A. M. Ashfaque 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**, 16th EXCITE Zurich Summer School on Biomedical Imaging, **University and ETH Zurich** (5-16 September, 2022)
- **University gold medalist** for securing **1st 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

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Prof. Dr. K.M. Azharul Hasan

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