Md Babul Islam

RESEARCHER · APPLIED MACHINE LEARNING

Via P. Bucci, Cube 41C, 87036 Rende (CS) Italy

(+39)-3464770931 | mdbabul.islam@dimes.unical.it | babulcseian.github.io | babulcseian | babulcseian

"Be the change that you want to see in the world."

Summary

Researcher and Former Lecturer, Expert in Artificial Intelligence, Data Science, IoT Machine Learning, Deep Learning, Bioinformatics, and Medical Healthcare Systems. Knowledgeable in most facets of computer science and engineering (theory and applied). Mr. Babul published a few papers in IEEE and Springer Conference and Journal papers. He has a strong background in project management and a teaching job as well likes to devote most of his time to conducting research because teaching is his area of enthusiasm. In addition, he enjoys immersing himself in novel knowledge

Education

University of Calabria (Unical)   *Calabria, Italy*

PH.D. IN INFORMATION AND COMMUNICATION TECHNOLOGIES (ICT)   *Nov. 2022 - Nov. 2025*

- PNNR full funding scholarship

Huzhou University (HU)   *Zhejiang, China*

PH.D. IN INFORMATION ENGINEERING   *Sep. 2019 - Jul. 2022*

- Full Funding Presidential Scholarship

City University (CU)   *Dhaka, Bangladesh*

B.SC IN COMPUTER SCIENCE AND ENGINEERING (CSE)   *Nov.2013 - Mar. 2017*

- Full Funding Presidential Scholarship

Attended Conference & Review

CONFERENCE

2023	**Paper Presented**, EWSN Conference, University Calabria	*Italy*
2023	**Poster Presentation**, Ph.D Day , University Calabria	*Italy*
2022	**Online Submitted Paper**, DOSCI 2022, CCICT 2022, ICOECS 2022, CCET 2022, ICDCECE 2023	*India*
2021	**Paper Presented**, ISCEIC 2021, I3CME 2021	*China*

PAPER REVIEW

2023	**PC Member**, Quatic 2023,	*Portugal*
2023	**Reviewer**, EMCEI 2023	*Italy*
2022	**Paper Review**, ICMIAC IEEE Conference-2022, AICAT IEEE Conference 2022	*China*

Teaching Work History

Micro Institute of Technology(MIT)   *Dhaka, Bangladesh*

LECTURER   *March 2018 – October 2019*

- Main Agenda: Share knowledge to conduct theory classes, practical skills, and Teach techniques subjects, and Labs at MIT. Also Supervised a plethora of final-year projects.
- Course Taken: C Programming, Basic Python, Java Programming, Web Design, Web Design & Development, Data Structure & Algorithms, Multimedia & Graphics, Computer Servicing, Embedded System & PLC, Microprocessor & Micro-controller, Computer Network, Computer Architecture, Database Management System and Computer Final Year Project.
- Thesis/ Project/ Intern Supervised (6 Month): I supervised four final years student's projects (8th Semester) at Diploma in Computer Technology with the faculty of Computer Technology at Micro Institute of Technology, Dhaka, Bangladesh.

San Aibin Artificial Intelligent Education   *China*

PART TIME TEACHER   *Feb 2021 – 2021 Dec*

- Basic Computer Programming and English Teacher. As a foreign teacher, the medium of instruction was in English
- Teach the school's computer science curriculum to students between Year 12 and Year 18.
- Co-teach with Chinese teachers and be prepared to develop and improve school-based curriculum.
- Assess and monitor students' progress and provide targets so that all learners can succeed and improve

Industrial Work History

Aeinnovation Energy
Italy

Applied ML Engineer
June 2023 – On Going

- **Energy Efficiency :** Apply ML algorithms in IoT smart building to reduce the cost, in the context of thermal comfort.

ICAR-CNR (Italian Govt. Research Institute)
Italy

Research Assistant
Jan. 2022 – On Going

- As a research assistant help to involve the different projects. My main objective is to apply ML models to make IoT more efficient

Zhejiang Seating Technology Co., Ltd
China

Data Analysis
June 2022 – December 2022

- Proficiency supporting data and analytics efforts in an innovative environment to support business goals.
- Defining the business problem, analytical approach, extracting relevant data, appropriately using statistical and data analysis techniques
- Customers performance analysis from the CSV files.

Zhejiang Linxin Smart Home Co., Ltd.
China

Data Analyst
Dec. 2021– June 2022

- As a Data Scientist, I did web scrapping of a different kind of E-Commerce website to extract information to build a better and grow business, Managing International Alibaba and Amazon Platform at Zhejiang Linxin Smart Home Company Limited, Zhejiang, China.
- SEO E-Mail Marketing: Keyword Searching, Off-On page, Backlink SEO, Google Adds, Team Work Contributions, Customer Satisfactory

Crown Hospital
Bangladesh

IT Assistant
February 2016 – January 2018

- LAN, all attendance sheet checkup, report making, web Server maintenance, router setting camera, etc.

Skills

Programming Languages	Python (Pandas, NumPy, Scikit-Learn, Matplotlib, Keras, PyTorch), Java, C, C+ HTML/CSS, JavaScript, SQL
ML	Supervised, Unsupervised, Self-supervised (RL, FL)
Developer Tools	Jupyter Notebook, PyCharm, Eclipse, Google Cloud Platform, Android Studio
Languages	English, Bangla, Chinese (Basic)

Award & Extracurricular Activity

Academic Award

2023	**Ph.D. Student's Director**, I have been elected as Ph.D. students director of the School of ICT at the University of Calabria.
2022	**Ph.D Scholarship**, Full funding PNRR Scholarship (Tuition, accommodation, and stipend) at Unical
2021	**Office Director**, International Student Union(ISU), Huzhou University
2019	**Master's Scholarship**, Master's Full Funding Scholarship (Tuition, Accommodation and Stipend) at Huzhou University (HU).
2019	**Best Teacher**, at Micro Institute of Technology
2015-17	**Bachelor Tuition Scholarship**, In my under-graduation time, I was awarded the last 5 semesters for the highest CGPA.

Non-Academic and Online Certificate

2021	**English Language**, Foreign Language (TEFL) Certificate Course
2021	**Volunteers**, Excellent Volunteers Certificate at HU.
2020	**Online ML Course**, Online IBM Machine Learning Course (Certified)
2020	**Online DC Course**, Online IBM Data Science (Certified)
2020	**Cultural Award**, Room Beautification at Huzhou University
2016	**Programming Contest**, Programming Contest at the University of San Francisco.

Running Project

ToT Smart Home Management

Italy

PROGRAMMING LANGUAGE: PYTHON

Nov. 2023

- Through the use of data from IoT edge computing, sensors, and implementation devices, we will create ML algorithms, to enable improved energy efficiency for the optimum management of smart home buildings without reducing the comfort of the people living in such buildings
- In our investigation, we'll also look at several strategies for enhancing the functionality (big data center, taking opinions from different ages of people, personal data accuracy, weather, HVAC and prediction) of the key elements of a smart home system Beside, will focus on activity recognition, privacy-preserving, and dialogue systems.

Completed Projects

Covid-19 with Machine Learning

China

VARIOUS PYTHON MODULES

Jan. 2021

- Goal: Applying Machine Learning Algorithms and Compare Performance, Business Analysis include foods, along with Twitter Sentiment Analysis (Vaccine and people reactions)

Fraud Detection (ML, DC)

China

VARIOUS PYTHON MODULES

Jun. 2021

- Goal: We will create a few machine learning (ML) models utilizing anonymized credit card transaction data in this project. We have compared performance, SMOTE, and ADASYN with Machine Learning Algorithms.

Web Based E-Commerce B2B and B2C

Bangladesh

HTML, CSS, PHP, BOOTSTRAP, AJAX

Dec. 2017

- Goal: A web-based, Business to Business(B2B), and, Business customers (B2C); E-Commerce based site where consumers buy and sell their products. They can buy old and new products as well

Other Projects

Bangladesh

HTML, CSS, PHP, BOOTSTRAP, AJAX

2014 -2018

- How to Caught a Thief in my House(Safety House or Room) and Seven Segment Lighting Systems | *Arduino, Arduino Library, ISIS Proteus Professional -7*
- Management System | *C++, Microsoft access*
- Smart Traffic Android App | *(Design part), Android Studio*
- BM newspaper-Where true always talk without fair | *HTML, CSS, PHP, Bootstrap*
- Traffic Alert | *Arduino, Arduino Library, ISIS Proteus Professional -7*

List of Research Paper

Submitted Paper

JOURNAL AND CONFERENCE PAPER

Till Now

1. Md Babul Islam and others IoT Smart Home and Machine Learning for Energy Efficiency (Submitted)
2. Md Babul Islam and others AI health care systems: Patients Sentiment Analysis and Emotion Detection (Submitted Q2 Journal)

Accepted Paper

JOURNAL AND CONFERENCE PAPER

Till Now

1. Islam, Md Babul, et al. "Detect deception on banking credit card payment system by machine learning classifiers." Second International Conference on Cloud Computing and Mechatronic Engineering (I3CME 2022). Vol. 12339. SPIE, 2022.
2. Islam, Md Babul, et al. "Cost Reduce: Credit Card Fraud Identification Using Machine Learning." 2022 7th International Conference on Communication and Electronics Systems (ICCES). IEEE, 2022
3. Islam, Md Babul, et al. "A fiber wireless improved 5G network-based virtual networking system focused on equal bandwidth." 2021 2nd international symposium on computer engineering and intelligent communications (ISCEIC). IEEE, 2021.
4. Islam, Md Babul, et al. "Twitter Opinion Mining on COVID-19 Vaccinations by Machine Learning Presence." Proceedings of Third Doctoral Symposium on Computational Intelligence: DoSCI 2022. Singapore: Springer Nature Singapore, 2022.
5. Islam, Md Babul, et al. "Pandemic Outbreak Time: Evaluation of Public Tweet Opinion by Machine Learning." 2022 IEEE International Conference on Current Development in Engineering and Technology (CCET). IEEE, 2022.
6. Islam, Khandaker Sajidul, et al. "Blockchain Based New E-voting Protocol System without Trusted Tallying Authorities." 2022 Fifth International Conference on Computational Intelligence and Communication Technologies (CCICT). IEEE, 2022.
7. Sayeed, Md Abu, et al. "Bangladeshi Traffic Sign Recognition and Classification using CNN with Different Kinds of Transfer Learning through a new (BTSRB) Dataset." 2023 International Conference on Distributed Computing and Electrical Circuits and Electronics (ICDCECE). IEEE, 2023.

Reference and Research Collaboration

Bachelor and Master's Supervisors

2019-22	**Master's Supervisor**, Yanlei Kang (Ph.D.), Associate Professor, School of Information Engineering, Huzhou University, Mobile: +86- 13216172216, 02959@zjhu.edu.cn	*China*
2019-22	**Bachelor Supervisor**, Md Nuruzzaman, IT Head and Associate Professor, Alif Village Ltd and City University, Mobile: +880 1738240548, it@aliflammim-bd.com	*Bangladesh*

Research Cooperation

2023	**List of People**, Prof. Giancarlo Fortino, Dr. Raffaele Gravina and many more	

Declaration:

I hereby declare that the above information is correct to the best of my knowledge.

Yours Sincerely

Islam Md Babul

....

Md Babul Islam