



# Emran Ali

## Education | Research | Development

I am an enthusiastic, hardworking, and patient life-long learner who has experience in teaching and research at university with industrial development skills. I developed excellent critical thinking, problem-solving, computer programming, communication, and management skills throughout my studies and professional periods. I wish to expand and use my knowledge and experiences to contribute to the outcome based productive progresses in leading universities, institutes and industries anywhere in the world.



### Summary

- Teaching/training experience: >10 Years
- Research experience: >12 Years
- Software development experience: 3 Years
- Research publications: >15
- Institutional involvement: 3
- Industry involvement: 5
- Industry collaboration projects: 4
- Specialisation certificate: >20



### Education

- Ph.D. in Information Technology | Jan.2023-Present (Ongoing)**  
Deakin University, Melbourne, Australia -**joint with-** Coventry University, Coventry, UK  
A Machine Learning-Based Analysis of Sleep Patterns in Aging Using Physiological Signals  
Machine Learning (ML) | Deep Learning (DL) | ML Interpretability | Health Informatics | Brain-signal Processing | Sleep | Aging | Healthy Aging | Sleep Disorders | Data Analytics | Business Analytics
- M.S. (by Reserach) in Information Technology | Feb.2020-Oct.2022**  
Deakin University, Melbourne, Australia  
Minimising Electroencephalogram Channels for Epileptic Seizure Detection  
ML | DL | Medical Technology | Signal Processing | Optimisation | Epilepsy | Environment
- B.Sc. in Computer Science and Engineering (CSE) | Jan.2007-Feb.2012**  
Hajee Mohammad Danesh Science and Technology University (HSTU), Dinajpur, Bangladesh  
Advanced String Searching Mechanism with Indexed Binary Search for J2ME English to English Dictionary Application  
Algorithm Development | Searching Algorithm | Application Development



### Professional Experiences

- Digital Research Trainer | Casual | Mar.2023-Present**  
Intersect Australia, Australia  
Python and Machine Learning Training
- Research Assistant | Casual | Apr.2020-Dec.2024**  
Deakin University, Melbourne, Australia  
Project involvement and collaboration:  
-Epileptic Seizure Detection for ICU Patients - (col.) Monash University & Alfred Health  
-Indoor Air Temperature and Pollution Prediction - (col.) Monash University & Aetmos Australia
- Graduate Research Teaching Fellow (Tutoring+Sessional) | Part-time| Feb.2025-Present**  
Deakin University, Melbourne, Australia  
Tutoring, Marking & HelpHub: Python Programming, Data Science, Machine Learning, Database, Business Analytics
- Academic Staff (Tutoring+Sessional+HelpHub) | Casual | Mar.2020-Present**  
Deakin University, Melbourne, Australia  
Tutoring, Marking & HelpHub: Python Programming, Data Science, Machine Learning, Database, Business Analytics
- Faculty Member (Teaching and Research) | Full-time | Sep.2014-Present (on leave)**  
Hajee Mohammad Danesh Science and Technology University (HSTU), Dinajpur, Bangladesh  
Teaching (Theory+Sessional) | Research | Collaboration
- Software Developer & Project Development Manager | Full-time | Feb.2012-Aug.2014**  
Advanced Apps Bangladesh (AAPBD) Limited, Dhaka, Bangladesh  
iOS, Android, Web App Development+Testing, Project+Team+Client Management



### Awards and Recognitions

- Burtelsmann Next Generation TechBooster Scholarship (Phase-1) | Burtelsmann & Udacity, 2024-2025.
- AWS AI/ML Scholarship (Phase 1 and 2) and mentorship | AWS & Udacity, USA, 2023-2024.
- Cocutelle Ph.D. Fellow, Deakin University, Australia & Coventry University, UK, 2023.
- Deakin University Post-graduate Research Scholarship (DUPRS), Deakin University, Australia, 2023.
- Bangabandhu Science and Technology Fellowship (BSTF), Bangabandhu Science and Technology Fellowship Trust (BSTFT), Ministry of Science and Technology, Bangladesh, 2020.
- Best Presentation Award, Annual Conference (2021), School of IT, Deakin University, 2021.
- Best employee award, AAPBD, 2013.
- Ranked 1st from Bangladesh in the entrance exam-2013 for the Master's program at South Asian University (SAU), India, operated by SAARC (<https://www.saarc-sec.org>).
- Ranked 1st in the batch in Bachelors from CSE department at HSTU, 2012.
- Ranked 1st in the Intra-University Computer Programming Contest (CPC) at HSTU, 2009.



### Profiles

- LinkedIn <https://bd.linkedin.com/in/wwwmemran>
- Google Scholar <https://scholar.google.com/citations?user=ej8d6LkAAAAJ>
- GitHub <https://github.com/WWW-EMRAN>
- ORCID <https://orcid.org/0000-0003-3095-5265>

### Contact

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- [www.emran](http://www.emran)
- <https://emran.humachlab.com/>

### Expertise

- Data Analytics
- Machine (Deep) Learning
- AWS & Azure
- GenAI & XAI
- Signal Processing
- Apple App Development

### Research Area

- Data Science & Analytics
- Machine (Deep) Learning
- Health Informatics & MedTech
- Disease Detection and Prediction
- (Bio)Signal Processing
- Time-series Data Analysis
- Business & Market Analytics

### Personal Skill

- Critical Thinking
- Problem Solving
- Communication
- Leadership

### Programming Language

- Python
- Java
- Objective-C/Swift
- SQL
- C/C++
- R
- PHP

### Language

- English
- Belgali (Bangla)

### Membership (Student)

- IEEE
- IEEE EMBC
- ACS
- DUSA

### References

Available upon request