



# 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 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 | 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.Sc. (by Reserach) in Information Technology | 2020-2022**  
Deakin University, Melbourne, Australia  
Minimising Electroencephalogram Channels for Epileptic Seizure Detection  
ML | DL | Medical Technology | Brain-signal Processing | Optimisation | Epilepsy | Weather Prediction
- **B.Sc. in Computer Science and Engineering (CSE) | 2007-2012**  
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

### Pofessional Experiences

- **Research Assistant | Casual | 2020-2024**  
Deakin University, Melbourne, Australia  
Project involvement and collaboration (col.):  
-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 (Teaching+Sessional) | Part-time| 2025-Present**  
Deakin University, Melbourne, Australia  
Tutoring, Marking & HelpHub: Python Programming, Data Science, Machine Learning, Database, Business Analytics
- **Sessional Academic (Teaching+Sessional+HelpHub) | Casual | 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 | 2014-Present (on leave)**  
Hajee Mohammad Danesh Science and Technology University (HSTU), Dinajpur, Bangladesh  
Teaching | Research | Collaboration
- **Software Developer & Project Development Manager | Full-time | 2012-2014**  
Advanced Apps Bangladesh (AAPBD) Limited, Dhaka, Bangladesh  
iOS, Android, Web App Development+Testing, Project+Team+Client Management

### Awards and Recognitions

1. Burtelsmann Next Generation TechBooster Scholarship (Phase-1) | Burtelsmann & Udacity, 2024-2025.
2. AWS AI/ML Scholarship (Phase 1 and 2) and mentorship | AWS & Udacity, USA, 2023-2024.
3. Cocutelle Ph.D. Fellow, Deakin University, Australia & Coventry University, UK, 2023.
4. Deakin University Post-graduate Research Scholarship (DUPRS), Deakin University, Australia, 2023.
5. Bangabandhu Science and Technology Fellowship (BSTF), Bangabandhu Science and Technology Fellowship Trust (BSTFT), Ministry of Science and Technology, Bangladesh, 2020.
6. Best Presentation Award, Annual Conference (2021), School of IT, Deakin University. 2021.
7. Best employee award, AAPBD, 2013.
8. 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>).
9. Ranked 1st in the batch in Bachelors from CSE department at HSTU, 2012.
10. 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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[emran.ali@research.deakin.edu.au](mailto:emran.ali@research.deakin.edu.au)  
<https://emran.humachlab.com/>

### Expertise

- Data Analytics
- Machine (Deep) Learning
- AWS & Azure
- GenAI & XAI
- Signal Processing
- iOS 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
- C/C++
- R
- SQL
- PHP

### Language

- English
- Belgali (Bangla)

### Membership (Student)

- IEEE
- IEEE EMBC
- DUSA

### References

Available upon request