

# MD. ZAKIR HOSSAN

741, Khan Shaheb Lane, Hazi Nasiruddin Road, Donia, Dhaka - 1236

☎ +88 01885 570 597 ✉ [zshujon@gmail.com](mailto:zshujon@gmail.com) [linkedin.com/in/zshujon](https://www.linkedin.com/in/zshujon) [github.com/zshujon](https://github.com/zshujon) [Google Scholar](#)

## Career Goal

---

To become a pioneering academic figure, driving cutting-edge research, inspiring innovation, and fostering the next generation of tech leaders, while creating a dynamic learning environment that fuels unprecedented advancements.

## Research Interests

---

- Control Theory
- Particle Physics
- Physics-Informed Neural Nets
- Quantum Computing
- Machine Learning
- Computer Vision

## Ongoing Research

---

Advancing High-Energy Particle Physics through Machine Learning for Enhanced Discovery and Analysis, under the supervision of Professor **M Ashraful Amin** and Professor **Arshad Momen**.

Physics-Informed Machine Learning, under the supervision of Professor **Arsad Momen** and Professor **Amin Ahsan Ali**.

## Current Position

---

### Research Manager

*Center for Computational & Data Sciences, CCDS*

**Jan 2022 – until the present**

*Independent University, Bangladesh*

## Teaching Experience

---

### Lecturer

*Independent University, Bangladesh*

**Jan 2026 – until the present**

*Adjunct*

### Lecturer

*Manarat International University*

**Jun 2016 – Sept 2025**

*Adjunct*

### Lecturer

*Sonargaon University*

**May 2018 – Apr 2022**

*Adjunct*

### Instructor

*National Institute of Engineering & Technology*

**Feb 2014 – Apr 2017**

### Lecturer

*MCET Engineering College*

**May 2012 – Sept 2013**

## Research Experience

---

### Research Associate

*Artificial Intelligence and Cybernetics Lab*

**Jan 2020 – Dec 2021**

*Independent University, Bangladesh*

### Research Assistant

*Computer Vision & Cybernetics Group*

**Jan 2016 – Dec 2019**

*Independent University, Bangladesh*

## Industry Experience

---

### Software Engineer

*ISHO Ltd*

**Mar 2019 – Sept 2019**

*DekkoISHO Group*

### Deep Learning Engineer

*Socian Ltd.*

**Sept 2017 – Feb 2018**

### Software Engineer

*Business Accelerate BD Ltd.*

**May 2017 – Aug 2017**

*R&D*

## Publications

---

### Journal Paper

- Md Raqibul Islam, Adrita Khan, Mir Sazzat Hossain, Choudhury Ben Yamin Siddiqui, **Md. Zakir Hossan**, Tanjib Khan, M. Arshad Momen, Amin Ahsan Ali, AKM Mahbubur Rahman, "E-PCN: Jet Tagging with Explainable Particle Chebyshev Networks Using Kinematic Features", <https://arxiv.org/abs/2512.07420>.

### Conference Paper

- Mohammad Aftab Mahmud, Md. Ridwan Mahmud, **Md. Zakir Hossan**, Asif Mahmud, Ashraful Islam, M Ashraful Amin, "Blockchain-Enabled Voluntary Carbon Credit Marketplace for Bangladesh: A Decentralized Solution to Climate Accountability", 2025 IEEE 23rd Student Conference on Research and Development (SCOREd), 25 - 26 November 2025 - Universiti Malaya, Kuala Lumpur, Malaysia.
- Sayeed Islam, **Md. Zakir Hossan**, "A Review of Available Standard Dataset for Automated Medicine Pill Recognition Technology", Third International Conference on Intelligent Computing, Instrumentation & Control Technologies, ICICICT-2022. Aug 11-12, 2022, Kannur, Kerala, India.
- Sayeed Islam, Md. Ferdous Khan, **Md. Zakir Hossan**, M Ashraful Amin, "An Overview of Radio over Fiber (RoF) Technology", 2nd INTERNATIONAL CONFERENCE ON INTELLIGENT COMPUTING, INSTRUMENTATION AND CONTROL TECHNOLOGIES. Jul 5-6, 2019, Kannur, Kerala, India.
- Tanjina Piash Proma, **Md. Zakir Hossan**, M. Ashraful Amin, "Medicine Recognition Using Number of Color and Text of Pill Image", 3rd International Conference on Graphics and Signal Processing. June 1-3, 2019, Hong Kong.
- **Md. Zakir Hossan**, Sayeed Islam, Md. Ferdous Khan, Sayma Shammi, M. Ashraful Amin, "Boiler Explosion In Bangladesh: Causes, Consequences and Precautions", International Conference on Management Science and Industrial Engineering. May 24-26, 2019, Phuket, Thailand.
- Sakhawat Hosain Sumit, **Md. Zakir Hossan**, Tareq-Al-Muntasir, Tanvir Hassan Sourov, "Sentiment Analysis with Recurrent Neural Network using Long Short-Term Memory in Bengali Language", International Conference on Bangla Speech and Language Processing (ICBSLP), September 21-22, 2018, SUST, Sylhet, Bangladesh.

### Datasets

- **Recognizing Medicine from Medicine Image:** Develop and deploy the medicine recognition system on the custom dataset and improve the overall feature detection techniques, which will be extremely useful to identify their prescribed pills out of the packaging.
- **National Medicine Image Database Creation:** Collecting raw pill image data maintains the quality of images such as proper lighting, angle, and visual of the engraved or imprinted text on the surface.
- **40k Bangla Newspaper Article:** Custom-made Bangla text corpus from various online newspapers. The Dataset may be used for Text Generation, Document Classification, Topic Modeling, etc.  
<https://www.kaggle.com/zshujon/40k-bangla-newspaper-article>.
- **4K Bangla Song Lyrics:** The dataset contains 4K (4068) Bangla song lyrics in Bangla Unicode font. All the lyrics were collected via web scraping. Those who want to use this must do some cleaning. The dataset is useful for character-by-character sequence generation or any other NLP task.  
<https://www.kaggle.com/zshujon/4k-bangla-song-lyrics>.
- **Bangla digits:** Bangla digits from standard TTF (true type font) file.  
<https://www.kaggle.com/zshujon/bangla-digits-from-ttf-files>

## Education

---

### North South University

*Master of Science in Electrical & Electronic Engineering*

**2017**

*3.67/4.0*

### International Islamic University Chittagong

*Bachelor of Science in Electrical & Electronic Engineering*

**2011**

*3.514/4.0*

### University Laboratory College

*Science, Dhaka Board*

**2006**

*3.7/5.0*

### AK High School

*Science, Dhaka Board*

**2004**

*4.69/5.0*

## Technical Skills

---

**Languages:** Python, Java, C, SQL

**Developer Tools:** Google Cloud Platform, Android Studio

**Technologies/Frameworks:** Linux, GitHub, PyTorch, TensorFlow

## Certificate Course

---

### 6.00.1x: Introduction to Computer Science and Programming Using Python

<https://verify.edx.org/cert/98aa9b561646439bb0aa3335a8d21069>

MITx

edX

### DAT204x: Introduction to R Programming

<https://verify.edx.org/cert/248dc1e779514b4e83b6335e257633f1>

Microsoft

edX

### RTSIX: Introduction to Real-Time Systems

<https://courses.edx.org/certificates/49f75687f8ec4c889c6ee4bfa383ee>

IEEE

edX

## References

---

### M Ashraful Amin, PhD

- Founder Director, Center for Computational & Data Sciences
- Professor, Computer Science & Engineering
- Independent University, Bangladesh
- +88 01715 807 181
- [aminmdashraful@iub.edu.bd](mailto:aminmdashraful@iub.edu.bd)

### M Arshad Momen, PhD

- Director, Graduate Studies, Research and Industry Relations
- Professor, Physical Sciences
- Independent University, Bangladesh
- +880 1841 366 367
- [arshad@iub.edu.bd](mailto:arshad@iub.edu.bd)