



Department of Electrical and Electronic Engineering  
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**Anis Ahmed**

Lecturer

**Research Area** Power System Engineering,  
Control Engineering

## Biography

**Anis Ahmed** is a dedicated academic and engineer with a specialization in **Electrical and Electronic Engineering**. He holds both a **Master of Science** and a **Bachelor of Science** from Khulna University of Engineering & Technology (KUET), Bangladesh, where he achieved outstanding academic results, including a perfect CGPA of **4.00** in his M.Sc.

Currently serving as a **Lecturer** in the Department of Electrical and Electronic Engineering at KUET, Anis has instructed numerous courses, supervised undergraduate theses, and provided consultancy and research services. His teaching portfolio includes advanced topics such as **Power Systems, High Voltage Engineering, and digital Electronics**, demonstrating his depth of knowledge and expertise in the field.

In addition to his academic roles at KUET, Anis has contributed as a **guest lecturer** at North Western University (NWU) and as a **part-time** lecturer at Khulna University. His **industry experience** includes a tenure as an Assistant Manager (Technical) in the Telecom Department of Bangladesh Telecommunication Company Limited (BTCL), where he managed technical operations and office tasks.

Anis's **research interests** are reflected in his publications, which include studies on **interconnected power systems, sliding mode control, demand side management, microgrids, frequency regulation, automatic voltage regulation, and intelligent algorithm-based tuning of PID controllers**. His work has been recognized at various IEEE conferences, showcasing his contribution to the field of electrical engineering.

Throughout his academic journey, Anis has been the recipient of numerous scholarships and awards, including the prestigious Faculty **Dean's Award** and the KUET Technical Scholarship. He is also actively involved in leadership and volunteer activities, such as his role as Joint Secretary of the Magura Club of KUETians and his participation in organizing international conferences.

Anis's technical skills are extensive, with proficiency in **MATLAB, C/C++, VHDL, Verilog**, and several other tools and software. His practical experience is further enhanced by his involvement in various industrial attachments and training courses, making him a well-rounded professional in both academic and technical domains.

## Education

### M.Sc. in EEE

Khulna University of Engineering & Technology ,Bangladesh,Bangladesh(July-2022-2024)

**Thesis Title:** [Design and Performance Analysis of a Modified Sliding Mode Controller for Electrical Systems](#)

### B.Sc. in EEE

Khulna University of Engineering & Technology ,Bangladesh,Bangladesh(2020)Merit Position: 3,

### Higher Secondary Certificate

Cantonment College, Jashore,Bangladesh(2015)Group: Science,

### Secondary School Certificate

Magura govt. High School, Magura,Bangladesh(2013)Group: Science,

## Research Interest

### Power System Engineering, Control Engineering

Microgrid, voltage and frequency stability, sliding mode controller, H-infinity controller, LQR controller, PID, Intelligent Algorithms  
Demand side management, Electric vehicle

## Publication

### Books

### Journals

1. A. Ahmed, N. K. Roy and A. Nasir, "A Novel Weighted Exponential Sliding Mode Controller with a Modified Reaching Law for the Frequency Regulation of a Renewable Integrated Isolated AC Microgrid," **Electric Power Systems Research** , Elsevier, 2024 .

### Conference

5. S. Dev and A. Ahmed, "A Comparative Analysis between  $H_\infty$  and Sliding Mode Controllers on Automatic Voltage Regulator System," **International Conference on Power, Electrical, Electronics, and Industrial Applications (PEEIACON), 2024**, IEEE, 12-13 September 2024 .

4. N. P. Bishnu, Z. B. Azam, A. Ahmed and a. N. K. Roy, "Robust Automatic Voltage Regulation using Modified Super Twisting Sliding Mode Control," **International Conference on Power, Electrical, Electronics, and Industrial Applications (PEEIACON), 2024**, IEEE, 12-13 September 2024 .

3. A. Ahmed and N. K. Roy, "Speed Control of DC Motor Using Sliding Mode Controller Tuned by Genetic Algorithm," **10th IEEE International**

**Conference on Power Systems (ICPS)**, IEEE, 13-15 December 2023 , DOI:10.1109/ICPS60393.2023.10428866.

2. A. Ahmed, N. P. Bishnu and N. K. Roy, "A Comparative Analysis of Intelligent Algorithm-Based Tuning of PID Controller for Speed Control of BLDC Motor," **6th International Conference on Electrical Information and Communication Technology (EICT)**, IEEE, 07-09 December 2023 , DOI:10.1109/EICT61409.2023.10427912.

1. A. Ahmed, M. N. Mollah and A. Shihavuddin, "Tumor Detection by Rectangular Microstrip Patch Antenna," **3rd International Conference on Sustainable Technologies for Industry 4.0 (STI)**, IEEE, 18-19 December 2021 , DOI:10.1109/STI53101.2021.9732605.