

Dr. Md. Salah Uddin Yusuf Professor

Research Area 2021\_Target Research Area (Self motivated students are encouraged to take part in the following state of art topics):

Processing Power System Analysis and Design Image Processing and Video Coding

## **Biography**

Dr. Md. Salah Uddin Yusuf received his BSc, MSc and PhD degree in Electrical and Electronic Engineering with First Class from Khulna University of Engineering & Technology (KUET) in 2001, 2005 and 2016, respectively. After he obtained the BSc Engineering degree, he joined in the Department of Electrical and Electronic Engineering of KUET as a Lecturer in 2001. Latter on he ioined as an Assistant Professor in 2005 and Associate Professor in 2014 respectively. Currently, Dr. Yusuf is serving as a Professor in the same department. He is very active in research activities and published over 40 technical journal and conference papers. In professional activities Dr. Yusuf is a life fellow of Institution of Engineers (IEB), Bangladesh [F-10967] and a regular member of International Association for the Engineers (IAENG) [Member No: 145275]. He is also a member of IEEE (Membership No.94299155). As Sub-Project Manager, he has successfully completed the Modern Healthcare Monitoring System Signal World Bank funded Higher Education Quality Enhancement Project (HEQEP) through UGC, Bangladesh. He also completed and continuing several research project funded by CASR(KUET) and UGC, Bangladesh. His research interests mainly focus on: Signal/Image and Video Processing, Image/Video Quality Assessment, Face Recognition and Authentication, Power System Analysis.

#### **Education**

### **Doctor of Philosophy in Electrical & Electronic Engineering**

 $Khulna\ University\ of\ Engineering\ \&\ Technology, Bangladesh (2016) Student\ Type: Regular,$ 

Thesis Title: Efficient Mode Selection Scheme for Video Coding

Master's of Science in Electrical and Electronic Eneering

Khulna University of Engineering & Technology, Bangladesh (2005) Student Type: Regular,

Thesis Title: Numerical Electromagnetic Analysis of Lightning Surge Response on Vertical Conductor

**Bachelor of Science in Electrical and Electronic Engineering** 

Bangladesh Institute of Technology (BIT), Khulna, Bangladesh (2001) Group: EEE, Student Type: Regualr,

Thesis Title: Transient Stability Analysis of Multi-Machine System

**Higher Secondary School Certificate** 

Bogra Cantonment Public School and College, Bangladesh (1995) Group: Science, Student Type: Regular, Merit Position: 10th Place in Rajshahi Board,

Secondary School Certificate

Bogra Zilla School, Bangladesh (1993) Group: Science, Student Type: Regular,

## Service Records

Professor

**Department/Section:** Electrical and Electronic Engineering

Khulna University of Engineering & Technology (KUET) From to

**Associate Professor** 

Department/Section: Electrical and Electronic Engineering

Khulna University of Engineering & Technology (KUET)  $From\ to$ 

**Assistant Professor** 

**Department/Section:** Electrical and Electronic Engineering Khulna University of Engineering & Technology From to

Lecturer

**Department/Section:** Electrical and Electronic Engineering Khulna University of Engineering & Technology From to

# **Research Interest**

#### 2021 Target Research Area (Self motivated students are encouraged to take part in the following state of art topics):

(i) Face Liveness Detection and Emotion Analysis (ii) GAN-based Image and Video Generation (iii) Deep Learning based Security Authentication (iv) Human Emotion Analysis and Modeling (V) Human Activity Recognition challenges and their remedies

#### Modern Healthcare Monitoring System

Design and Implementation of a Hospital Based Modern Healthcare Monitoring System on Android Platform

#### Signal Processing

EEG, ECG, EMG, EOG signal analysis and interpretation, Heart rate analysis from PPG, Face Liveness recognition and Authentication.

#### **Power System Analysis and Design**

Smart Grid and its Impact Analysis, Power System Transient Analysis, Lightning Surge Analysis on Transmission and Communication Tower and Design of Surge Arrester

Image Processing and Video Coding

My recent research interests mainly focus on: Deep Learn based Image and Video Processing, Content-based Video Copy Detection, GAN-based Image and Video Generation, Image/Video Quality Assessment.

Moving Object detection and Identification, Deep Learning based Finger Vein Recognition