

# Md. Omar Faruk Noman

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A-96/2 Bank colony, Savar, Dhaka



## CAREER OBJECTIVE

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To obtain a teaching position where I can share my theoretical and practical knowledge with students and strengthen their enthusiasm and level of creativity.

## EDUCATIONAL QUALIFICATION

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**BACHELOR OF SCIENCE** 2017 - 2022

Electronics and Telecommunication Engineering (ETE)  
Chittagong University of Engineering & Technology (CUET), Chattogram.

**Result:** CGPA 3.71 out of 4.00

**HIGHER SECONDARY CERTIFICATE** 2014 - 2016

Dhaka Residential Model College, Dhaka

**Result:** GPA 5.00 out of 5.00

**SECONDARY SCHOOL CERTIFICATE** 2012 - 2014

Dhaka Residential Model College

**Result:** GPA 5.00 out of 5.00

## PUBLICATIONS (Ongoing)

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- **Design of a Miniaturized Dual-Band Rectangular Patch Antenna for 5G Millimeter-Wave Applications**, Md. Omar Faruk Noman, Md. Azad Hossain.  
**Status:** Under review (Submitted to IEEE conference on Sustainable Technologies for Industry 4.0)
- **Design of a Slotted Patch Circular Antenna Array for Breast Tumor Identification**, Ishrat Jahan, Md. Omar Faruk Noman, Md Ahasan Kabir.  
**Status:** Under review (Submitted to IEEE conference on Sustainable Technologies for Industry 4.0)

## PROJECTS

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### 1. Microstrip Patch Antenna for Brain Tumor Detection.

Designed a Microstrip patch antenna with dimension of 45 x 38 mm<sup>2</sup> in order to detect the presence of tumor in brain. E-field, H-field and current density were analyzed to detect the tumor. SAR analysis for 1g and 10g tissue was also done.

**Tools:** CST Microwave Studio.

**Supervisor:** Dr. Md. Azad Hossain, ETE, CUET.

### 2. Vehicle Estimation for Traffic Control.

Designed a traffic control system for calculating number of vehicles on the road using image processing.

**Tools:** MATLAB.

**Supervisor:** Md Ahasan Kabir, ETE, CUET.

### 3. IOT Based Home Automation System.

Designed an IOT based home automation system for controlling different electronic products such as TV, fan, light using human voice.

**Tools:** Arduino, Bluetooth Module HC-05, Relay, Temperature Sensor, LEDs.

**Supervisor:** Md Ahasan Kabir, ETE, CUET.

### 4. FM Radio Transmitter and Receiver.

Implemented a radio transmitter for generating and transmitting radio wave. A receiver circuit with automatic gain control system is also designed to receive the transmitted signal successfully.

**Tools:** Transistor, Capacitor, Inductor, Potentiometer, Antenna, Condenser Mic.

### 5. Design of a Network Topology and Configure It in RIP Routing Protocol.

A complete network topology has been designed with routers, switches, hubs and end elements.

**Tools:** Cisco Packet Tracer.

### 6. Design of Animated Website and a Portfolio.

Developed a complete website where people can watch animated series of different genre and get the latest updates of different series.

**Tools:** HTML, CSS, PHP, SQL.

### 7. Implementation of Function Generator with Over Voltage Protection.

Designed a circuit to generate different type of waves along with over voltage protection.

**Tools:** LM7805 IC, Resistor, Capacitor, Potentiometer, Op-amp.

### 8. Exploring Machine Learning Algorithms and Neural Network to Solve Real World Problems.

Applied various regression and classification algorithms to solve real world problem.

**Tools:** Google Colab, Python.

## INDUSTRIAL TOUR

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- BNS Shaheed Moazzem, Kaptai, Rangamati.

## RESEARCH & TEACHING INTEREST

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|------------------------------------|------------------------------------|
| • Antenna and Wave Propagation     | • Signals and System               |
| • Analog and Digital Electronics   | • Digital Signal Processing        |
| • VLSI Technology                  | • Microprocessor & Microcontroller |
| • Analog and Digital Communication | • Neural Network & Fuzzy Systems   |
| • Optical Fiber Communication      | • Image Processing                 |
| • Internet Programming             |                                    |

## SKILLS

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Languages	: C, C++, MATLAB, Python.
Web programming	: HTML, CSS, PHP, SQL, WordPress.
Tools	: CST Microwave Studio, Cadence, Cisco Packet Tracer, Wireshark, Proteus, Google colab, NetBeans.
Algorithms	: Machine Learning, Neural Network.
Software	: Microsoft word, Microsoft Excel, Microsoft PowerPoint, Codeblocks.
Hardware	: Microcontroller, Arduino

## PERSONAL ATTRIBUTES

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- Very good logical and analytical skills.
- Ability to communicate and deal with stressful situation in a professional manner.
- Expert at multi-tasking.

## LINGUAL PROFFICIENCY

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- **Bangla**(Native proficiency)
- **English**(Full professional fluency)

## ACHIEVEMENTS

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- **Merit-based Scholarship:** For obtaining outstanding CGPA in all semesters in CUET.
- **Government Scholarship:** For obtaining outstanding GPA in secondary school certificate (SSC) and junior school certificate (JSC).
- **Best Project Award:** For image processing-based project.

## EXTRA-CURRICULAR

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- Assistant Office Secretary, CUET Remians' Association.
- Champion, Intra Hall Cricket Tournament.
- Executive member, DRMC Science Club.

## PERSONAL INFORMATION

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<b>Name</b>	: Md. Omar Faruk Noman.
<b>Date of Birth</b>	: 10 <sup>th</sup> August, 1998.
<b>Gender</b>	: Male.
<b>Nationality</b>	: Bangladeshi.
<b>Address</b>	: A-96/2 Bank colony, Savar, Dhaka.
<b>Attributes</b>	: Positive, Enthusiastic, Diligent.
<b>Hobbies</b>	: Teaching, Reading, Travelling.

## REFERENCE

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Dr. Md. Azad Hossain.  
Professor, ETE, CUET  
☎ +8801783756981  
✉ azad@cueta.ac.bd

Dr. Md. Saiful Islam.  
Assistant Professor, ETE, CUET  
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## DECLARATION

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I do hereby declare that the statements made in this document are true to the best of my knowledge and belief.

  
Md. Omar Faruk Noman