

# MD. OMAR FARUK NOMAN

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🌐 [Website](#) | [LinkedIn](#) | [ResearchGate](#)

## 🎓 EDUCATION

### BACHELOR OF SCIENCE (B.Sc)

Electronics and Telecommunication Engineering (ETE)  
Chittagong University of Engineering & Technology (CUET)  
CGPA: **3.71 / 4.00.**

February, 2017 - June, 2022  
**Chittagong, Bangladesh**

### HIGHER SECONDARY CERTIFICATE (H.S.C.)

Dhaka Residential Model College (DRMC)  
GPA: **5.00 / 5.00.**

June, 2014 - August, 2016  
**Dhaka, Bangladesh**

### SECONDARY SCHOOL CERTIFICATE (S.S.C.)

Dhaka Residential Model College (DRMC)  
GPA: **5.00 / 5.00.**

January, 2012 - May, 2014  
**Dhaka, Bangladesh**

## 🔍 RESEARCH INTEREST

- Antennas and Propagation, RF Communication.
- Wireless Communication.
- Optical Communication
- VLSI Technology.
- Machine Learning

## 🔬 RESEARCH EXPERIENCE

### Undergraduate Thesis

February, 2021 - April, 2022

**Title: Design and characterization of compact dual band Microstrip patch antenna for 5G applications.**

Designed a patch antenna with dual band characteristics and compact size for 5G technology. The antenna was designed both in CST and HFSS. The simulated result verifies antenna's suitability for 5G millimeter-wave applications.

**Supervisor:** [Dr. Md. Azad Hossain](#), ETE, CUET.

## 📄 PUBLICATIONS

- **M. O. F. Noman**, A. Istiaque and M. A. Hossain, "Design and Analysis of a Dual-Band Miniaturized Rectangular Patch Antenna for Millimeter-Wave Applications," 2022 4th International Conference on Sustainable Technologies for Industry 4.0 (STI), Dhaka, Bangladesh, 2022, pp. 1-6, [doi: 10.1109/STI56238.2022.10103233](https://doi.org/10.1109/STI56238.2022.10103233).
- I. Jahan, **M. O. Faruk Noman** and M. Ahasan Kabir, "Design of a Slotted Patch Circular Antenna Array for Breast Tumor Identification," 2022 4th International Conference on Sustainable Technologies for Industry 4.0 (STI), Dhaka, Bangladesh, 2022, pp. 1-6, [doi: 10.1109/STI56238.2022.10103240](https://doi.org/10.1109/STI56238.2022.10103240).
- I. Jahan, **M. O. Faruk Noman**, Mahabub-E-Sanjida Tasnim and M. Ahasan Kabir, "Design and Analysis of an Octagonal Slotted Patch Microstrip Antenna for Brain Tumor Detection," 2023 5th IEEE International Conference on Sustainable Technologies for Industry 5.0 (STI), Dhaka, Bangladesh, 2023.  
**Status:** Accepted.

## ACADEMIC PROJECTS

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- **GSM Based Home Automation System.** **February, 2020 - CUET**  
Designed a GSM based home automation system for controlling different electronic appliances such as Television, electric fan, light etc. ([10.13140/RG.2.2.18803.50722](#))  
**Tools:** Arduino Uno, SIM900 GSM/GPRS shield, DHT-11 humidity & temperature sensor.  
**Supervisor:** [Md. Ahasan Kabir](#), ETE, CUET.
- **FM Radio Transmitter and Receiver.** **December, 2021 - CUET**  
Designed an FM radio transmitter to transmit FM modulated signal and also an FM receiver to receive and demodulate the transmitted signal. ([10.13140/RG.2.2.31640.26888](#))  
**Tools:** LM386 IC, Potentiometer, Antenna, Condenser Mic.  
**Supervisor:** Taeba Taher, ETE, CUET.

## TECHNICAL SKILLS

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- Research and scientific article writing.
- Skilled at performing simulations using CST Microwave studio, ADS, HFSS.
- Moderately proficient at MATLAB, Cadence, Simulink, CISCO Packet Tracer, Proteus.
- Programming familiarity with C, C++ and Python.
- **Web Programming:** HTML, CSS, Javascript, WordPress.
- **Hardware:** Arduino, Microcontroller.
- **Documentation & Presentation:** Microsoft Office suite, LaTeX.

## RELEVANT COURSEWORK

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Electronics-I, Electronics-II, Signals & Systems, Digital Logic Design, Electromagnetic Fields and Waves, Microwave Engineering, Numerical Methods in Engineering, Digital Signal Processing, Antenna and Propagation, Wireless and Mobile Communication, Neural and Fuzzy Systems in Communication.

## STANDARDIZED TEST SCORE

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- International English Language Testing System (IELTS) **3<sup>rd</sup> October, 2023**

Overall	Listening	Reading	Writing	Speaking
7.5	8.5	7.5	6.5	7

## AWARDS

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- **Merit based scholarships** in all semesters in CUET. (2017-2022)
- **General merit scholarship**, Secondary School Certificate (SSC), Dhaka Board. (2014)
- **Talent-pool merit scholarship**, Junior School Certificate (JSC), Dhaka Board. (2012)
- **1<sup>st</sup> prize**, Quiz Competition in 9<sup>th</sup> DRMC Science Carnival organized by Dhaka Residential Model College. (2016)

## EXTRA-CURRICULAR ACTIVITIES

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- Champion, Intra Hall Cricket Tournament, CUET. (2019)
- Organized ‘**ETE DAY-17**’ and ‘**TELMESH-1.0**’.
- Volunteer, [Hult Prize@Chittagong University of Engineering and Technology](#). (2017)
- Volunteer, ‘**ROBI CAREER CARNIVAL**’ held at CUET. (2017)
- Executive member, [DRMC Science Club](#). (2014 - 2015).