Md Naim

+880-1726151703
naimeee17@gmail.com
#03, Chowhodditola, Chapai Nawabganj, Bangladesh

EDUCATION

B.Sc., Electrical and Electronic Engineering (EEE)   [2018 - 2023]
Shahjalal University of Science and Technology (SUST), Sylhet
CGPA - 3.32 out of 4.0

Higher Secondary School Certificate (HSC)   [2015 - 2017]
Notre Dame College (NDC), Dhaka
GPA - 5.00 (A+)
Group - Science

Secondary School Certificate (SSC)   [2014 - 2015]
Hari Mohan Government High School, Chapai Nawabganj
GPA - 5.00 (A+)
Group – Science

EMPLOYMENT

- **Shanto-Mariam University of Creative Technology (SMUCT),** Ad-hoc Lecturer   [Sept 2023 - Present]
    - Designed and conducted courses (Electrical Circuits, Physics, Computer Fundamental)

THESIS & PROJECT EXPERIENCE

1. **Final Year Thesis – "Black Phosphorus-Based FeFET Design and Investigation of its Transistor & Memory Applications"**

   - This research project explores the cutting-edge field of Black Phosphorus-Based FeFET design. We focused particularly on its remarkable dual functionality as both a transistor and a memory device. Our study highlighted its unique ability to store and erase data, suggesting a potential leap in memory systems' sophistication. With its performance surpassing traditional transistors, this research contributes to the advancement of semiconductor technology, marking a new era of multifunctional devices.

2. **A Line Follower and Robo Fight Robot**

   - Designed, built, and programmed an Arduino-based line-following robot using C/C++, optimizing for accurate line tracking and speed in competitive events.
   - Developed a Radio Controlled (RC) combat robot which can be controlled from a safe distance and with custom-designed weapons and defenses participated in multiple regional and national robotics competitions where C/C++ is used as a base code for the Arduino.

3. **An Automatic Room Temperature Controller**

   - Designed and implemented an IoT-based temperature control system for a smart room where C/C++ is used for PID control algorithms to regulate temperature.
   - Integrated sensors and actuators with microcontroller units are used to develop a user interface for remote monitoring and control.

4. **Design and Development of an Underwater Autonomous Vehicle (UAV)**

   - Designed and implemented control systems for an underwater vehicle.
   - Developed algorithms using both python and C/C++ for navigation and obstacle detection.
   - Collaborated with a team to integrate hardware and software components.

5. **A Prototype Development for an Autonomous Vehicle (Auto Mama)**

   - Developed embedded systems for an autonomous vehicle.
   - Programmed microcontrollers for sensor integration and data processing.
   - Designed and fabricated custom PCBs for vehicle control systems.
   - Tested and refined algorithms for improved vehicle performance.

DEVELOPMENT SKILLS

Programming Languages
- C/C++
- Python
- MATLAB
- Arduino
- SQL

Tools & Libraries
- Visual Studio, Code Blocks
- PyCharm
- Microsoft Office Suite
- Blender

Platforms
- Linux/Ubuntu
- Control Systems
- Embedded Systems
- IoT (Internet of Things)
- PCB Design

INDUSTRIAL TRAINING

- Industrial Technology on Electrical Engineering and Instrumentation, Training Institute for Chemical Industries (TICI), Polash, Narsingdi, Bangladesh, August - September 2022

CERTIFICATIONS

- MATLAB course in Coursera- Introduction to Programming with MATLAB
- SQL for Data Science in Coursera
- Python Course and Workshop- A Basic to Advance Workshop on Python in RoboSUST
- Project Showcasing:
  - Boost Converter Design for a solar system (3rd year final project)
  - Robotic hand design for industrial automation (3rd year course project)
  - Water level indicator and motor control system (2nd year course project)

ACHIEVEMENTS

- Runners-up, Robo Fight Competition, United International University (UIU), 2022.
- Finalist, Singapore AUV Challenge (SAUVC), 2020.
- Runners-up, Robo Fight Competition, Islamic University of Technology (IUT), 2019.
- Participant, Various Robot Competitions (KUET, RUET, IUBAT), 2019, 2020 & 2022.
- Perfect Attendance, Notre Dame College, Dhaka, 2015 – 2017.
- 2nd Place, Storytelling Competition, Hari Mohan Govt High School, 2011.

LEADERSHIP & INVOLVEMENT

- **Robotics & IoT Community,** Advisor (Sept 2023- Present)
  Shanto-Mariam University of Creative Technology (SMUCT), Dhaka
- **RoboSUST,** Vice President (2021 – 2022)
- **IEEE SUST Student Branch,** Assistant General Secretary (2019 – 2021)
- **Varendra Association,** Public Relations Secretary (2019 – 2020)

INTERESTS

- Photography
- Photo editing
- Cycling
- Short Story Writing
- Cricket
- Animation
- Online Problem-Solving
- Robotics

LANGUAGES

- English – Full Professional Proficiency
- Bengali (Native) – Full Professional Proficiency

REFERENCES

Dr. Ifte Khairul Amin
Associate Professor,
Dept. of EEE, SUST.
Phone: +8801911034624,
Email: iftekhar-eee@sust.edu.

Nafis Imtiaz Rahman
Lecturer & Thesis Supervisor,
Dept. of EEE, SUST.
Phone: +8801711519433,
Email: imtiaz-eee@sust.edu.

Dr. Md Rasedujjaman
Associate Professor & Head,
Dept. of EEE, SUST.
Phone: +8801714557885,
Email: mrased-eee@sust.edu.

Md. Naim
Signature