NAHID AHMED SHIHAB

BSc IN ELECTRICAL AND ELECTRONIC ENGINEERING
BRAC UNIVERSITY
Dhaka, Bangladesh

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Driven undergraduate at BRAC University with a strong background in Electrical and Electronic Engineering, skilled in hardware, software development and robotics automation. Successfully completed various projects and eager to contribute innovation and leadership to dynamic teams. Actively seeking opportunities for meaningful collaboration and ready for a discussion on how my expertise can benefit organization.

EXPERIENCE

June 2024 - present || Full-time (Hybrid)

VendyLTD || Vending Machine manufacturer

Electro-Computing Engineer

- **IoT based control systems**
- **PCB and Circuit develop**
- **Testing and Troubleshooting**

NOV 2023 - FEB 2024 || Internship

ZEROOZEN || A EV BASED COMPANY

HARDWARE ENGINEER

- **Pcb designing - altium, kicad, easyeda**
- **Hardware- powertrain, sensory appilication**
- **Powersim, matlab**
- **Thingspeak iot integration**
- **Troubleshooting , testing & documentation**
- **Farmware & coding**

JAN - APRIL 2024 || Cohort 1

ASPIRE INSTITUE || HARVARD UNIVERSITY

- **Aspire leaders program (apl'24)**
- **Cohort-01**
- **Fully funded professionla and leadership development program**

SKILLS

CAD & 3D MODELING

- **Fusion 360 used on various projects involving , sheet metal design and molding.**
- **AutoCAD, Blender, Fusion 360, Autodesk maya**
- **3D Design and Printing used to rapidly prototype parts**
- **Created 3D models based on .**

ELECTRICAL & SOFTWARE

- **PSpice, MATLAB, Proteus, PowerEsim**
- **PCB designing - KiCAD, Altium , EasyEDA**
- **PVsyst, Homer**
- **Embedded C program (Atmel, PIC)**
- **ANSYS - Engineering Simulation Software**

GAME DEVELOPMENT

- **Unreal engine 4, Unreal engine 5 used to create complex 3D models , game environments and level design.**
- **AR, VR**

CODING AND ML

- **HTML, CSS, JavaScript used to create many websites.**
- **C, C++, Python used to create awesome projects such as Gesture recognition and Voice assistant**
- **Machine Learning and Neural network**
- **ANN, CNN, KNN, Regression , classification in ML**
- **Image processing and Machine vision**

EDUCATION

BRAC UNIVERSITY || Summer 20 - Summer 24

Bachelor of Science in Electrical and Electronic Engineering

CGPA: 3.28 out of 4.00

ADAMJEE CANTONMENT COLLEGE || 2019

SCIENCE || GPA: 5.00 OUT 5.00

ADAMJEE CANTONMENT PUBLIC SCHOOL || 2017

SCIENCE || GPA : 5.00 OUT OF 5.00

RESEARCH WORK PUBLICATIONS

1. " Transformation and Future trends of Smart grid using Machine learning and Deep Learning." || Journal

International Journal of Applied Power Engineering (IJAPE) Inclusion of Scopus, Elsevier.

2. " Sizing an Off-Grid Photovoltaic system for a Regular East African Residence" || Conference paper

International Conference on Electrical Information and Communication Technology (EICT'23) in IEEE Explore

ACADEMIC WORKS

1. "Meat Quality grading and contamination identification to avoid foodborne infection and food quality control" || Capstone Project or FYDP

We are done with our research and simulation phase, now we are advancing on making a prototype.

we are making a combination of ML, Electrical systems, food engineering, sensory integration , material science and biotechnology. Our main goal is to contribute in improvement of public health and food research.

2. "NUCLEAR DISASTER: THE CHERNOBYL CASE STUDY" || Case Study

Power Plant Engineering, Dept. of EEE

PROJECTS

BRACU Duburi

- Worked on Machine Vision, Electrical and Mechanical Designs
- Bangladesh's First Underwater Autonomous Vehicle, has been one of the most successful student projects of BRAC University.
- Runner Up RoboSub 2023, California, USA

DRONE(UAV) & UGV Under LASSET

- Laboratory of Space System Engineering & Technology - LaSSET
- Autonomous Drone and Unmanned Ground Vehicle

NANO-SATELLITE TRAINING KIT

- A sophisticated Nano satellite model , which going to be use to educate people about the satellite technology.
- Features : Digipeater , telemetry data transmit, weather forecasting, broadcasting.

IoT BASED PROJECTS

- Smart surveillance rover
- Smart Home Automations
- Face recognition and Gesture identifications
- Robotics Arm 3Dof
- Door Security system NFC and RFID

GAME DEVELOPMENT AND LEVEL DESIGN

- MADE 2 games (Not Published)
- Created 9 level design and Game Environment using Unreal Engine

FPV Drone

- Highly agile drone, Can perform complex movement, High speed maneuvers

TRIOKILL-Sect

- It a self operated insect killing team project. we have made 3D modeling and animation.
- Team Omnishock, Our project got 4th in Robo Nokshar Ashor

AWARDS AND CERTIFICATIONS

- **VC's Recognition Awards || Volunteer BRACU**
  - For extraordinary volunteering activities
- **5Th POSITION IN SHEIKH JAMAL INNOVATION GRANT 2024 BY IDEA AND ICT DIVISION || DIPTO**
  - STEAM (Science, Technology, Engineering, Arts, Mathematics) TRAINING KIT
  - GAME AND WORKSHOPS
  - NANO SATELLITE TRAINNING KIT
  - New ways for gaining practical knowledge
- **AMBASSADOR CHALLAGE NATURAL LANGUAGE PROCESSING (NLP) || MICROSFOT AZURE**
  - PROCESSING HUMAN LANGUAGE USING COMPUTATIONAL METHODS
  - EXPLORING NLP METHODS LIKE BERT, GPT, XLNET
  - ANALYTICS AND DATA ANALYSIS
  - Sentiment Analysis And Entity Recognition, Machine Translation, Language Generation.
- **MICROSOFT BUILD: ACCELERATING AI DEVELOPMENT WITH LOW CODE || MICROSFOT AZURE**
  - Deploying Ai-empowered Applications
  - Development And Prototyping Copilot
  - Build App, Flows And Pages With Low Code And
  - No-code Interfaces
- **MICROSOFT BUILD: BUILD THE FUTURE OF PRODUCTIVITY WITH MICROSFOT 365 AND COPILOT FOR MICRSFOT 365 || MICROSFOT AZURE**
  - Building collaborative apps for Microsoft Teams using Microsoft Teams Toolkit
  - Extending Copilot for Microsoft 365
- **MICROSOFT BUILD: BUILD MULTIMODAL GENERATIVE AI EXPERIENCES || MICROSFOT AZURE**
  - AI fundamental skills
  - Generative AI development capabilities
  - GPT-4 and multi-modality with focus on Azure AI studio, AI Vision, AI Language with Dall-E and Whisper.
- **MICROSOFT BUILD: ACCELERATE DEVELOPER PRODUCTIVITY WITH GITHUB AND AZURE FOR DEVELOPERS|| MICROSFOT AZURE**
  - Coding in the cloud with GitHub Copilot
  - Debug problems and Upskill in new technology
  - Optimizing codes and environment
- **MICROSOFT BUILD: MICROSFOT FABRIC || MICROSFOT AZURE**
  - Engineering analytics
  - Power BI Data analysts for Exam DP-600 and Upskill to the Fabric analytics engineer association certifications
- **Basics of IOT and Embedded system || LASSET (Laboratory of Space System Engineering and Technology)**
  - Sensor Integration
  - App design for ESP32 using Adafruit IO and Blynk
  - Local and Cloud Servers
  - Hands on live experience
- **Basics Computer Vision for ROBOTICS || LASSET (Laboratory of Space System Engineering and Technology)**
  - Object recognition
  - Datasets and Train Models
  - Feature detection and Tracking
  - Evaluate performance Matrix
- **DOXPRO Robotics || Dreamtech 2020**
  - 55, Balaji Plot, Rajapeth , Amravati , INDIA
  - Workshop completion
  - LORAWAN, INDUSTRY AUTOMATION
  - Industry applications and system analytics

- **IEEE Robotics and Automation Society & WALTON PCB || Workshop**
  - Workshop completion
  - INDUSTRY AUTOMATION
  - PCB and System Design
- **THE AMERICA CENTER EMBASSY OF UNITED STATES AMERICA || 20-24 JUNE 2021**
  - Organized by Arduino Community of Bangladesh
  - Python Programing
  - Workshop Completion
- **HP Life & HP Foundation || 8 Courses**
  - Presenting data
  - Energy Efficiency
  - IT for Business success
  - Design Thinking
  - Effective Presentations
  - Unique value proposition, Effective leadership
  - 3D printing
- **FUNDAMENTALS OF LATEX || ROBU**
  - LATEX
  - WORKSHOP COMPLETION
- **GUINNESS WORLD RECORDS || 19 SEP 2021**
  - Organized by Virtualrunners
  - Most user to complete 10km run in 24 hours
  - Official part of the record holder
- **IEEE Robotics and Automation Society BRACU Student Branch Chapter || Workshop**
  - Workshop completion
  - Internet of Things (IOT)
  - Robot Operating System (ROS)
- **UNIBATOR 2024 || Team - Dipto**
  - innovation and entrepreneurship competition
  - Funded by World Bank, ICT Division of Bangladesh
  - Making easy to access STEM education
  - creating scope for student to get proper hands on experience
- **RIC 2024 || Research and Innovation**
  - Research and innovation, National Level competition
  - We're working on Public health related project
  - Our aim is build a system that will help to detect any abnormal particle in food, meat, dairy types of product with the help of Sensor, Image and ML
- **WORLD TAEKWONDO || Seoul, South Korea**
  - International DAN certificate
  - International Black Belt in Taekwondo Recognition
  - 3 international certificates
- **BANGLADESH TAEKWONDO FEDERATION**
  - 9 TIMES NATIONAL CHAMPIONS
  - 4 INTERNATIONAL CERTIFICATIONA AND AWARDS
  - 12 NATIONAL CERTIFICATION
  - 19 GOLD, 7 SLIVER & 4 BRONZE
  - 12 TROPIES

ASSOCIATION/ACTIVITIES

- **CO-Founder & CTO**
  - DIPTO , A Nano Satellite training Kit.
  - STEAM training kit
- **SUB TEAM LEAD (ELECTRONICS & POWER)**
  - Laboratory of Space System Engineering & Technology - LaSSET.
  - Autonomous Drone and Unmanned Ground Vehicle
- **ROBOTICS Club**
  - Former Secretary of Research and project management [RPM] of Robotics Club of BRAC University
  - 25+ projects, 56 certificates and awards
- **Electrical and Electronics Club**
  - Assistant Director of Research and Development of BRAC University Electrical and Electronic Club
  - Director of Graphics and Photography of BRAC University Electrical and Electronic Club
- **Taekwondo || Black Belt 2nd DAN**
  - Bangladesh Taekwondo Federation || (Korean Martial Arts)
  - DAN Certification form World Taekwondo federation, Seoul, South Korea.
- **ROVER(UAV) ,BRACU DUBURI**
  - Senior member of Mechanical team, BRACU DUBURI

REFERENCES

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