

# Md Abid Al Morshed Mechanical Engineer

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# **EDUCATION**

## **Bangladesh University of Engineering and Technology**

Dhaka, Bangladesh

Graduated: 27 May 2023

BSc in Mechanical Engineering

o Cumulative **GPA**: 3.67/4.00

o Relevant Coursework: Electrical and Electronics Technology, Metallic Materials, Industrial Management, Measurement and Quality Control Numerical Analysis, Computer Programming Language, Machine Design.

# **Chittagong College**

Chittagong, Bangladesh

Higher Secondary School Certificate

o **GPA:** 5.00/5.00

Session 2015-2017

### PROFESSIONAL EXPERIENCE

# **Energypac Engineering Ltd**

Baruipara, Savar, Dhaka

Internship Trainee

Oct 2022-Nov 2022

- o Learned about the production, assembly, and distribution of several transformer kinds.
- o Conducted several tests (CT/PT test, Resistance test, pf test, Insulation Resistance test) to ensure the product's quality.
- o Learned substation operation and power distribution.
- o Introduced with multiple welding, burnishing and painting techniques to construct transformer bodies

## RESEARCH EXPERIENCE

## Undergraduate **Thesis**

Thermal Analysis of Advanced Adiabatic Compressed Air Energy Storage System with Phase Changing Materials as Thermal Energy Storage

# ➤ Used ANSYS 3D design software tools to model TES system and FLUENT to solve for heat transfer and laminar flow.

#### **Current Work**

- convective Mixed heat transfer characteristic in vented cavity under dynamic flow modulation using CFD and Artificial Neural Network Model Approaches
- Regulation of Nanofluid Flow Through a Vented Cavity with Double Rotating Cylinders by Temperature-Controlled P, PI, and PID Controllers
- > Used COMSOL Multiphysics to model and solve for heat transfer and laminar flow. MATLAB is used to incorporate ANN and ANFIS with CFD model.
- COMSOL ➤ Used and PID controller model to design and solve for regulated laminar flow.

PROJECTS			
Electro- Mechanical System Design	An Arduino based Self-Balancing System		Used SolidWorks to model prototype and Fritzing to design circuit. Final model was built using an Arduino nano.
Thermo-Fluid System Design	Building a Refrigerator using Peltier Effect		<ul> <li>Used AutoCAD and SolidWorks to design prototype and final model was built using DIY material</li> </ul>
SKILLS			
Software tools		0 0 0	Office Softwares: Excel, Word, PowerPoint, Visio Design Softwares: CAD, SolidWorks Engineering Softwares: COMSOL, ANSYS  Python, Matlab, C  HTML, CSS  Written and Oral Communication: English and Bangla
HONORS ANI	O AWARDS		
Bangladesh Unive	ersity of Engineering and Technology		
<ul><li>University Stipend Scholarship</li><li>Dean's list Scholarship</li></ul>		2019 and 2020 Jan 2018 and Jul 2018	
Community of Ph	nysics		
• 2 <sup>nd</sup> Worksh	op on Relativity		3 March 2018

o Certificate of Participation

## Kaler Kantho

Biology Olympiad (Regional)

o First Runner-up

2017

# **CO-CURRICULAR ACTIVITIES**

# IMeche, BUET

• Media Content Co-ordinator

June 2022-Present

### **Buet Automobile Club**

• Technical Executive 2019-2020

• Deputy Chief (Design) 2020-2021

# ADDITIONAL INFORMATION

### **Hobbies:**

- Playing Guitar
- Graphics Design and Videography (Adobe Premiere Pro, Adobe After effects)

# **REFERENCES**

# Dr. Md. Zahurul Haq

Professor

Department of Mechanical Engineering, BUET

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## Dr. Md. Abdus Salam Akanda

Professor

Department of Mechanical Engineering, BUET

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