



Akash Baroi

B.Sc. in Mechanical Engineering

Personal Info

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Languages

English
Professional working proficiency
Bengali
Native Proficiency

Achievements

- **Go Green** award
Top fuel economy by ISIE, India.
- **Future HVC** award
Most potential team in HVC-17 by ISIE, India
- Certificate of Appreciation for outstanding contribution to Team Swapnojan by Dept of MPE, AUST
- Successful Participation in intra- university project show by Dept of EEE, BUET

Interested Field

- Automobile
- Power & Energy
- Oil & Gas
- HVAC

Objectives

I want to utilize my conceptual knowledge and technical skills along with creativity, enthusiasm, dynamism and thus developing my workability to utmost at engineering sector.

Experience

- 07/2021 - 10/2021 **HATIL (Hatil Complex Ltd- Domna, Muslimtek, Zirani, Gazipur)**
Trainee Engineer- Engineering & Maintenance
- Observation & trouble-shooting of mechanical breakdown maintenance of Hi-Tech CNC Machine
 - Plan, execution & effective scheduling of preventive maintenance
 - Monitored BBT, MDB, SDB, Generator, Compressor servicing & schedule maintenance
 - Short term & long term machine breakdown analysis
 - Spare parts & missing parts listing, reporting & relevant documentation work

Education

- 11/2015 - 05/2020 **Ahsanullah University of Science & Technology, Dhaka** | Bachelor of Science in Mechanical Engineering
CGPA: 2.96/ 4.00
- 05/2012- 06 /2014 **Birshreshtha Munshi Abdur Rouf Public College, Dhaka** | Higher Secondary Certificate in Science
GPA: 5.00/5.00
- 01/2010 - 03/ 2012 **Rayer Bazar High School, Dhaka** | Secondary School Certificate in Science
GPA: 5.00/5.00

Thesis & Projects

- 04/2019 - 03/ 2020 **Thesis: Redesign of Water Wave Generator to Harvest the Wave Energy.**
Supervised by Prof. Dewan Hasan Ahmed, Ahsanullah University of Science & Technology
- Redesign and reconstruction of a faulty wave generator
 - Development of wave measuring system & energy conversion device
 - Characterization of the water wave
 - Establishment of wave behavior in different wave generating member
 - Non-operative to fully automated water wave
 - An asset to AUST Fluid Mechanics Lab

Projects:

- 01/ 2018- 06/2018 **Modified Tesla Turbine** | Intra-University Fluid Dynamics Project
- Proactively modified the Tesla Turbine from the conventional design of scientist Nikola Tesla
 - Constructed and designed the turbine to utilize Boundary Layer Effect of fluid flow
 - Implemented in an internal combustion engine to utilize the flow of exhaust gas with 77.5% of turbine efficiency, participated on Intra-University project competition at BUET
- 05/2016 - 02/ 2017 **Hybrid Formula Car** | International Automobile Engineering Project
- Built a Hybrid Formula Car that was the **first ever** formula type car for Bangladesh
 - Contributed to fundamental project construction, Implemented IC engine and motor in hybrid system, Designed the suspension system of the car
 - Participated on **Hybrid Vehicle Challenge (HVC) -2017** organized by Imperial Society of Innovative Engineers (ISIE) at Buddh International Circuit, Uttar Pradesh, **India**
- 03/2016 - 06/ 2016 **Design of Positive Displacement Air Compressor** | CAD project
- Solidworks based 3D design of a Positive Displacement Air Compressor
 - Presented at departmental CAD exhibition

Technical Skills

Tools/Frameworks: SolidWorks (2D, 3D), AutoCAD, MATLAB, MS Word, MS PowerPoint

Language: C Programming

Data Analysis: Microsoft Excel

Operating System: Windows, MacOS, Linux

Training Summary

- **Vehicle Dynamics**

Topic Covered:

- Creating concepts & sketch
- Modeling Chassis
- Automotive Aerodynamics

Organization: Imperial Society of Innovative Engineers (ISIE)

At Uttar Pradesh, India

- **Customer Training program on Air Compressor**

Topic Covered:

- Working Principle of Oil Injected Air Compressors
- Air Filters, Scan & Dryers
- Screw elements
- Oil Details
- Trouble Shooting & Maintenance

Organization: Atlas Copco

Leadership & Involvement

Presenter of Mechanical Engineering Dept. of AUST during the accreditation of Institute of Engineers Bangladesh (IEB)

Organized "Saraswati Puja" for the students of Hindu community at AUST

Executed departmental sports tournament for 900 students

Volunteer: Mechanical Job Fair organized by Osongaiyito ME-5th Batch

Organizer: Conducted workshop on Automobile Engineering

References

Dr. Dewan Hasan Ahmed

Professor

Department of MPE, AUST

dhahmed@hotmail.com

Dr. Md.Kharshiduzzaman

Assistant Professor

Department of MPE, AUST

md.kharshiduzzaman@gmail.com

Interpersonal Traits

- Team player
- Ability to work under pressure
- Quick learner
- Good communication skills
- Sound in plan & execution
- Good in project management
- Time management with outmost integrity
- Self- motivated
- Research minded
- Critical thinker
- Keen to take challenges
- Resilient & determined to succeed

I, hereby certify all the information furnished above is correct to the best of my knowledge.



Signature