Ramesh Bhandari

Address: Panauti-10, Pasthali, Kavre
Gmail: bhandariramesh2056@gmail.com
Phone No.: +977-9861584607
LinkedIn: www.linkedin.com/in/ramesh-bhandari-78563b16b/

CAREER OBJECTIVE

To secure a challenging and rewarding position as a mechanical engineer where I can utilize my strong analytical and problem-solving skills to contribute to developing, improving, and producing innovative products while continuously learning and growing as a professional in the industry.

EDUCATION

Kathmandu University Bachelor's Degree in Mechanical Engineering, Specialization in Design and Manufacturing Department of Mechanical Engineering	*2017-2022* CGPA: 3.2/4
Liverpool International College 10+2 Science	*2015- 2017* Percentage: 77
Namo Buddha Higher Secondary English Boarding School School Leaving Certificate	*Graduated: 2015* Percentage: 81

SKILLS

- Proficient in Computer-Aided Design software (Solidworks, PTC Creo)
- Experience in 3D printing and prototyping.
- Competent skill in Ansys (Static structural and Fluent)
- Skilled in Microsoft Office (Word, PowerPoint, and Excel)
- Strong teamwork, excellent communication, and collaboration abilities
- Strong problem-solving and analytical skills

RESEARCH INTEREST

- Renewable Energy, Design and Manufacturing, Computational Mechanics, and Nanotechnology for cooling EV batteries

RELEVANT COURSEWORK

University Courses	Online Courses
CAD/CAM	Learning SOLIDWORKS: For Students, Engineers, and Designers
Advanced Manufacturing	Mastering ANSYS CFD
Finite Element Method	Geometric Dimensioning and Tolerancing (GD&T): Basics
Digital Manufacturing	
Fluid Mechanics	

INTERNSHIP

L.I. Service Center Pvt. Ltd (Hyundai Authorized)

Jan,2023- Apr 2023
***Supervisor**: Er. Sanam K.C.*

Service Engineer Intern

- Diagnose vehicle issues through customer descriptions and initial inspections, then communicate these technical findings to the appropriate service technicians.
- Develop and provide detailed repair estimates, including parts, labor, and time required, based on diagnostic reports and technical assessments.
- Learned to utilize standard maintenance tools and gained proficiency in fundamental maintenance procedures for both internal combustion engine (IC) vehicles and electric vehicles (EVs).
- Manage and maintain inventory of spare parts, ensuring optimal stock levels to meet workshop demands.
- Source and verify high-quality replacement parts, coordinating with suppliers for timely procurement.

PROJECTS

Earth-Air Cooling for the community-based System- A Case Study

***Supervisor**: Mr. Malesh Shah*

Project 22-05, Kathmandu University

- Conducted a thorough survey of the Budhanilkantha building in Kathmandu to accurately assess the energy needs for cooling during the summer season.
- Design the cooling solution, which involves creating a heat exchanger that utilizes geothermal energy.
- Simulating room environments to monitor temperature variations.

Study and Optimization of back pressure of automobile muffler

***Supervisor**: Dr. Surendra Sujakhu*

Kathmandu University

- Literature review of various optimization methodologies and setting optimization methodology to reduce back pressure.
- Market survey of different kinds of mufflers available and design of model according to the commonality.
- Optimization of back pressure by changing various parameters.

DOI: https://dx.doi.org/10.2139/ssrn.4615719

Design and Fabrication of Plastic Shredder

***Supervisor**: Dr. Surendra Sujakhu*

Kathmandu University

- Studied the impact of plastic on the environment, researched plastic waste recycling methods, calculated various design parameters required, designed a working model in Solidworks, fabricated, and demonstrated the outcome.

Design and Fabrication of rocker bogie *Supervisor: Dr. Bhola Thapa*
Kathmandu University

- Successfully built a rocker-bogie using hands-on workshop skills and Arduino programming and proudly demonstrated the impressive outcome.

Publication

Adhikari, N., Bhandari, R., & Joshi, P. (2024). Thermal analysis of lithium-ion batteries in electric vehicles using different cooling mediums. Applied Energy, 360, 122781. https://doi.org/10.1016/j.apenergy.2024.122781

- Investigation of maintaining battery temperature in electric vehicles by utilizing the cooling effect of an ethylene glycol solution.
- The research rigorously examines the interplay between ethylene glycol concentrations and cooling methods on EV battery performance. ANSYS and MATLAB, along with analytical techniques, were used for this project.

LICENSE AND CERTIFICATION

- **Certificate for Registration of General Registered Engineer**
  Nepal Engineering Council
  Registration Detail: Mechanical Engineering-79046

AWARDS AND ACHIEVEMENTS

- School level volleyball & table tennis champion

MEMBERSHIP

- Nepal Engineers' Association
- Ames
- Amnesty International

DECLARATION

All the above information is accurate to my knowledge and belief.

REFERENCE

Available upon request.

Note: For further information, please visit bhandari-ramesh.com.np.