

Aditya Amatya | Mechanical Engineer

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PROFILE

An adaptable and responsible Mechanical Engineer, proficient in Multibody Simulation, FEA Analysis and CAD Modelling. Interested in Research and Development and Product Design through both Engineering and Reverse Engineering. Motorcycle enthusiast with a focus on optimizing motorcycle performance. Passionate about Engineering for greater good of Society.

EDUCATION

Nov 2015 - Sep 2019

Bachelor in Mechanical Engineering

Institute of Engineering, Pulchowk Campus, Lalitpur

2012 - 2014

Higher Secondary Education Board Examination

Kanchanjungha Higher Secondary School, Biratnagar

Nov 2015 - Sep 2019

Bachelor in Mechanical Engineering

Institute of Engineering, Pulchowk Campus, Lalitpur

WORK EXPERIENCES

Aug 2022 - Present

CAE Engineer, Yatri Motorcycles, Kathmandu, Nepal

Involved in geometric benchmarking of motorcycle chassis, analyzing data and collaborating with design and development teams to optimize performance.

Performed Multibody Simulation of full motorcycle as well as of test rig using Altair's Motionview, analyzing and interpreting data to optimize vehicle dynamics and handling.

July 2022

ANSYS Trainer, SOMES, IOE Pulchowk Campus

Instructed in the '7 Days Workshop on ANSYS' organized by the Department of Mechanical Engineering at Pulchowk Campus, providing guidance and training to participants on ANSYS.

March 2020 – June 2022

Mechanical Design Engineer, Entegra Sources Pvt. Ltd., Kathmandu

Performed 3D modelling of various mechanical components, such as motorcycle helmets, automobile chassis, motorcycle swingarms, and equipment like cyclone separators, heat exchangers, and centrifugal pumps.

Conducted a wide range of analysis on diverse mechanical components, including structural, thermal, modal, harmonic, and CFD, ensuring accurate and precise results.

Dec 2018

Mechanical Internee, Kathmandu Milk Supply Scheme (DDC), Balaju, Kathmandu

Studied the existing engineering and management systems to identify areas for improvement and implement best practices in the design of the new conveyor system with a focus on space optimization.

2017 – 2018

Human Resource Manager, SOMES, IOE Pulchowk Campus

Organized National Mechanical Exhibition, Various Workshops, Trainings and Talk Programs.

Sep 2018

SolidWorks Trainer, SolidWorks Crash Course Training

Instructor in 10 days Training Workshop of “SolidWorks Crash Course” organized by Department of Mechanical Engineering, Pulchowk Campus

2017 – 2018

General Member, AIESEC Nepal

Organized different Youth Empowering Seminar, Global Village, Interacted on SDGs with different Foreign and Local Youths.

ACADEMIC PROJECTS

2019	Design and Test of Search and Rescue Unmanned Aerial Vehicle
2019	Design and Flow Analysis of Forward Curved Centrifugal Impeller
2018	Design and Test of Buoyancy assisted Trash Cleaner
2017	Design and Test of Theo -Jansen Mechanism to replicate the humanoid movement to robot.
2016	Design and Test of Automatic Fire Extinguishing Robot.

PUBLICATIONS

2020	Darlami, K., Amatya, A., Kunwar, B., Poudel, S., & Dhakal, U. (2020). “ <i>Design and Analysis of Twin-Vertical-Tailed Fixed-Wing Unmanned Aerial Vehicle</i> ”. <i>Journal of Automation and Automobile Engineering</i> , 5(3)
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AWARDS AND RECOGNITIONS

2018	Best Application Award (BE Mechanical Design Competition MechTRIX 8.0) Awarded for Buoyancy Assisted trash cleaner Project
2016	Title Winner (BE Mechanical Design Competition MechTRIX 7.0) Awarded for Automatic fire Extinguishing Robot

SKILL SET EXPERTISE TECHNICAL

2D and 3D Design and Modelling	Good command over SolidWorks, Autodesk Inventor, and AutoCAD
Multibody Simulation	Deft in Altair Motionview
Simulation Tools	Good Command over ANSYS (Structural, Modal, Harmonic, Fatigue, Thermal, Rigid Dynamics, CFD)
Mathematical Tools	Familiar with MATLAB and Mathematica
Programming Skills	Intermediate in Python
Kinematic Analysis	Fluent in GIM and Linkage
Aircraft Design and Analysis	XFLR5
Technical Report Writing	Command over MS Package and Latex
Fabrication and Machining	Can Operate on Lathe, Milling Machine and other Mechanical Machine and tools
Front End Web Development	Intermediate in HTML, CSS and JavaScript

MANAGERIAL

Project Management | Team work | Time Management | Excellent Communication skills |
| Goal Oriented | Problem Solving |

LANGUAGES

English	Fluent in English Speaking and Writing
Nepali & Maithili	Native Speaker
Hindi	Easily Comprehensible
Japanese	N4 and N5 Completed

PARTICIPATIONS

Apr 2019	Participant, National Youth Scientists Conference 2019
Dec 2017	Participant, National Conference on Youth and Sustainable Development Goals

References available upon request.