Upendra Gautam

Mechanical Engineering Student

Profile

"Hi 🖑! I'm an Engineering Student with fervent passion for Aviation and Technology. I have this tenacity of detail-oriented approach in solving complex problems and I believe in contributing to projects that might end-up changing the way we live our lives. There exists a vacuum in-between industry and academia which I refer as "Techno-ether" which embargoes orthodox wisdom in infiltration of a practical setting. So, it's essential for young mind to be groomed from an experienced one in building the innovators of tomorrow."

- a young mind

Education

BE Mechanical Engineering Institute of Engineering, Pulchowk Campus

Pulchowk, Lalitpur 2021-2025

Relevant Courses: Introduction to Engineering, Calculus, Thermodynamics & Heat Transfer, Numerical Analysis, Fluid Mechanics & Machines, Engineering Mechanics

+2 Physical Sciences Kathmandu Institute of Science & Technology

Kathmandu, Nepal 2018-2020/21

Relevant Courses: Pre-Calculus, Introductory Physics, Introductory Chemistry

Research and Interest Areas

Computational Mathematics - Combinatorics - Statistics - Algorithm Design - Engineering Design - Digital Strategy - Aircraft Dynamics

Experience

Stanford Code in Place, (S-CIP)

Apr 2024 - May 2024

- Part of Programming Class 2024 for problem solving with Python
- Built a sudoku solver utilizing backtracking algorithm

Samsung Innovation Campus, (SIC)

Pulchowk, Lalitpur Jan 2024 - Apr 2024

- Introduction to Python Programming Language
- Learned various algorithmic approach to problem solving
- Data Visualization and Data Filtering with numpy and matplotlib
- Built a GUI application for Analysis of Truss as SIC Hackathon Project

Eco-Village Development Project South-Asia District, (CRT-N)

Manbhawan, Lalitpur Nov 2023

- Served as an Assistant and Interlocutor for External Project Evaluator
- Facilitated communication between governmental agency, public and project evaluator
- Aided project evaluator with preliminary documentation
- Drafted report on 3 day Project Assessment Expedition

Kathmandu Aviation Museum, (KAM)

Singamangal, Kathmandu Oct 2018 - Nov 2018

- Assembled Plastic Aircraft Models to go on display inside the A330 Museum.
- Engaged in discussions regarding the current scenario of aviation in Nepal, contributing insights and ideas to enhance the industry.
- Facilitated activities to generate excitement about air travel among visitors, fostering a deeper appreciation for aviation history and innovation.

Projects

Sudoku Solver

2022

- Console Application for solving soduku
- Implemented back-tracking algorithm

Web Scrapper \bigcirc 2021

- Console Application that fetches IMDB's top 50 highly rated movies
- Utilized HTML parser and web request modules

GUI Calculator

2021

- Implemented Calculator utilizing Tkinter module
- utilized Reversed Polish notation for calculation

3D Zombie Apocalypse

2020

- Implemented infinite route traversal
- Implemented Pause/Resume, Menu window
- Added 3D kill animation for Zombie

Online Courses & Certifications

- Introduction to Programming with C# (2020) Sololearn
- Programming in Java (2020) Sololearn
- Programming with Python (2021) Udemy, Samsung
- Introduction to Cryptography (2022) Coursera

Skills

- Data Visualization: Numpy, Pandas, Scikit-learn
- Programming Languages: C, Java, C#, Python, and Shell-scripting
- Software: Git, Adobe Photoshop, SQL
- Engineering: AutoCAD, Solidworks, Ansys [Learning phase]
- Soft Skills: Presentation, Planning, Organized, Creative Problem-Solving, Teamwork, Active Listening, Analytical Thinking

Languages

• Nepali [Native]

• Hindi [Proficient]

• English [Proficient]