

## **YUGAL KRISHNA SHRESTHA**

Chandragiri-11, Kathmandu, Nepal

Phone: +977-9860988446

Email: [shrestha.yug20@gmail.com](mailto:shrestha.yug20@gmail.com)

---

### **EDUCATION**

- |           |  |
|-----------|--|
| 2015-2019 | Bachelor of Engineering, Mechanical Engineering<br>Institute of Engineering (IOE), Pulchowk Campus<br>Tribhuvan University (TU), Kathmandu, Nepal<br>Thesis: Development of Flow Visualization and Instrumentation<br>Systems for Open Circuit Subsonic Wind Tunnel and Their Validation<br>with Experiments on NACA 0012 Airfoil<br>Advisor: Aayush Bhattarai |
| 2013-2015 | +2, Science (Physics, Mathematics, Chemistry, English)<br>St. Xavier's College, Maitighar, Kathmandu, Nepal  |
| 1999-2013 | School Leaving Certificate (SLC)<br>Ambrosia Ideal (A. I.) Secondary School, Satungal, Kathmandu, Nepal  |

### **PUBLICATIONS**

1. Acharya, B. B., Shrestha, Y. K., Dhakal, S., Joshi, U., & Poudyal, K. N. (2021). Prediction of daily global solar radiation using different empirical models at eastern subtropical region, Nepal. *International Research Journal of Environmental Sciences*, 10(1), 14-22.
2. Shrestha, Y. K., Kavar, Y., Dhakal, S., & Bhattarai, A. (2020). Development of flow visualization and instrumentation systems for open circuit subsonic wind tunnel and their validation with experiments on NACA 0012 airfoil. *Journal of Recent Trends in Mechanics*, 5(1), 20-41.

### **PROJECTS**

- Development of flow visualization and instrumentation systems for open circuit subsonic wind tunnel and their validation with experiments on NACA 0012 airfoil
- CFD analysis of air flow through backward-curved centrifugal impeller on ANSYS Fluent
- Design and fabrication of Automatic Wheel Chair Using DC Motor with assistance from Robotics Club, Pulchowk Campus for MechTRIX 8: 8<sup>th</sup> National Mechanical Engineering Exhibition organized by SOMES (Society of Mechanical Engineering Students)

### **HONOURS AND ACHIEVEMENTS**

- Merit-based scholarship to study Bachelor of Mechanical Engineering at Tribhuvan University's Institute of Engineering, Pulchowk Campus (2015-2019)
- Rank 43 in IOE national entrance examination of TU (2015)
- School Topper: School Leaving Certificate (SLC) (2013)
- Third position in Western-Kathmandu Interschool Quiz Competition (2010)

## EXPERIENCES

October 2019-March 2020

### Tutor

**Ambrosia Ideal (A. I.) Secondary School**

Satungal, Kathmandu

- Taught Mathematics and Science to secondary level students

September-October 2018

### Intern

**Chaudhary Group (C. G.) Food Park**

Tikabhairab Road, Bhainsepati, Lalitpur, Nepal

- Prepared CAD models of different machinery parts used in manufacturing plant in SolidWorks
- Involved in quality control of noodles and cheese balls in Nepal Thai Foods (NTF) and Kwiks Food Nepal (KFN) respectively
- Calculated monthly electricity consumption in different units of C.G. Food Park

## MOOCS AND CERTIFICATES

- **Machine Learning**

Instructor: Andrew Ng, Stanford University

<https://www.coursera.org/account/accomplishments/certificate/W2KHQVXY8KLQsd>

Gained introductory knowledge on supervised learning, unsupervised learning, and best practices in machine learning, and worked on some case studies like text understanding, computer vision, etc.

- **Using Python for Research**

Instructor: Jukka-Pekka Onnela, Associate Professor of Biostatistics, Harvard University

<https://courses.edx.org/certificates/1826d4b571ba418cba55880722adf0f6>

Learnt to apply python research tools (NumPy, SciPy, etc.) through several case studies and a final project

- **Mechanical Behavior of Materials: Linear Elastic Behavior**

Instructor: Lorna J. Gibson, Professor of Materials Science and Engineering, MIT

<https://courses.edx.org/certificates/dbe021e620394942810d8343baef6652>

## SKILLS

Software

SolidWorks, ANSYS (Workbench), MS Office, LaTeX

Programming Languages

C, MATLAB, Python

Languages

Nepali (Native), English (Proficient), Hindi (Basic)

## ACTIVITIES AND SERVICES

- Participated in the 1st International Symposium on Control, Energy, and Nano-Engineering organized by Society of Mechanical Engineering Students (SOMES) at National Academy of Science and Technology (NAST)
- Active member of Society of Mechanical Engineering Students (SOMES)
- Volunteered to successfully conduct MechTRIX events organized annually by SOMES
- Played Super Six Cricket Tournament organized by Students' Union at Pulchowk Campus