SUMAN SUBEDI

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EDUCATION

Master of Science Aerospace

Oct 2019 - Present

Technische Universitaet Muenchen Arcisstr. 21, 80333 Muenchen, Germany.

Bachelor of Mechanical Engineering

Nov 2013 - Sept 2017

Tribhuvan University

Institute of Engineering, Pulchowk Campus, Lalitpur, Nepal. Aggregate Percentage 79.15%

Higher Secondary Education in Science, HSEB, Class XI and XIIAug 2010 - June 2012 Sagarmatha Higher Secondary School, Pokhara, Nepal. Aggregate Percentage 81.40%

School Leaving Certificate, NEB, Class X

June 2010

Motherland Higher Secondary School, Pokhara, Nepal. Aggregate Percentage 84.75%

SKILLS AND INTERESTS

Skills Matlab, Basic Simulink, Intermediate C++, Basic Python **Interests** Aircraft Dynamics, Control Theory and Optimization

Language Skills Nepali (*Mothertongue*), English (*Fluent*), German (*Intermediate*) **Soft Skills** Fluent, CatiaV5, Solidworks, LaTeX, MS Office Tools, Adobe Suite

OS Linux and MS Windows.

BACHELOR THESIS

Modeling of Gas-Phase Combustion with Detailed Reaction Mechanism and Study of Combustion Test Cases Sept 2016 - July 2017

Supervisor: Dr Sudip Bhattrai

- Developed closed homogeneous constant pressure reactor and adiabatic premixed flow reactor Iterative Newton Method Solvers in Matlab.
- · Studied transient characteristics of premixed hydrogen-air combustion involving 9 species and 20 chemical reactions using the developed solvers.
- · Carried out preliminary design of a one-dimensional combustor in terms of exit temperature control using with bypass air injection.

HONORS/SCHOLARSHIPS

- Full-scholarship for Bachelors top 20th scholarship awardee among approx. 13,000 applicants. Oct 2013
- Outstanding academic award for Science 2011/12 Sagarmatha Higher Secondary School Dec 2013

PUBLICATIONS

- A. Acharya, S. Pokharel, **S. Subedi**, S. Lama, B. Bomjan, S. Bhattrai, Modeling of Fuel- Air Combustion with Detailed Reaction Mechanism and Thermodynamics, International Conference on Physics of Space and Materials (ICPSM) 2017, Nepal. [Poster Presentation] Aug 2017

PROFESSIONAL EXPERIENCE

Development of Unmanned Aerial Vehicle (UAV) for delivery of medicine by airdrop to distant rural health posts from hub health centers Jan 2018 - April 2019

Volunteer Engineer

National Innovation Center, Kathmandu, Nepal.

- Designed aerodynamic and structural aspects of fixed wing UAV for static/dynamic stability and structural integrity.
- · Fabricated the fixed-wing UAV using foam, wood, and carbon fiber.
- · Tested the UAV for manual and automatic flight.
- · Wrote mission planning scripts for the UAV onboard companion computers.

Industrial Attachment

Oct 2016 - Nov 2016

Internship

Middle Marshyangdi Hydropower Station, Siundibar, Lamjung, Nepal.

- · Involved in systematic inspection of Dam and Desander.
- · Studied and reported the hydropower's mechanical and electrical systems' construction and working.
- · Experienced organizational and managerial aspects and behavior of the plant.

Aircraft Model Development

Jan 2017 - April 2017

Volunteer

Aviation Museum, Sinamangal, Kathmandu, Nepal.

 Worked in a team for 3D modeling and development of a 1:6 scaled-down model of the Wright Flyer for the Museum.

POSITION OF RESPONSIBILITY

- Design Head of Seventh National Mechanical Engineering Exhibition organised by SOMES Designed and controlled overall aesthetics and design-functionality of the event. Jan 2017 Feb 2017
- Lead member of Post earthquake relief campaign (Nyano Initiative): fundraising and distribution of warm clothes to the sufferers of 2015 Nepal Earthquake residing in rural settlements of Nepal. Jan 2016

REFERENCE

Dr. Nawaraj Bhattrai, Head of Department

Department of Mechanical Engineering Pulchowk Campus, Institute of Engineering Tribhuvan University Lalitpur, Nepal bnawraj@gmail.com

Dr. Mahabir Pun, Owner

National Innovation Center Kathmandu, Nepal nicnepal.mahabir@gmail.com +977-9841592361

Dr. Sudip Bhattrai, Assistant Professor

Department of Mechanical Engineering Pulchowk Campus, Institute of Engineering Tribhuvan University Lalitpur, Nepal sudip@ioe.edu.np

Er. Prasanna Muni Tamrakar

Assistant Manager (Mechanical) Middle Marsyangdi Hydropower Station Siundibar, Lamjung, Nepal