europass

Jayant Mukhopadhaya

Date of birth: 27/11/1993 | **Nationality:** Indian | **Phone number:** (+49) 15228186094 (Work) | **Email address:** j.mukhopadhaya@theicct.org | **Address:** Fasanenstrasse 85, 10623, Berlin, Germany (Work)

WORK EXPERIENCE

01/09/2021 – CURRENT Berlin, Germany

SENIOR AVIATION RESEARCHER INTERNATIONAL COUNCIL ON CLEAN TRANSPORTATION

- Leading the research into zero-emission propulsion technologies and the non-CO2 warming impacts of aviation.
- Developing relationships with government officials, industry stakeholders, and journalists to disseminate and implement policy recommendations based on research findings.
- Published research papers, lectured at universities, and participated in panel discussions to cement the teams presence in the aviation decarbonization field.

01/04/2017 – 01/06/2021 Stanford, United States

UNIVERSITY RESEARCH ASSISTANT STANFORD UNIVERSITY

- Implemented and validated a physics-based uncertainty quantification methodology for Computational Fluid Dynamics simulations.
- Created multi-fidelity probabilistic aerodynamic databases representing uncertain performance characteristics of a full configuration T-tail transport aircraft.
- Performed virtual flight testing through statistical simulation of a FAA flight certification maneuver.

01/07/2019 – 01/09/2019 Palo Alto, United States

AEROSPACE ENGINEER AERION SUPERSONIC

- Performed multi-point, constrained, aerodynamic shape optimization on a supersonic aircraft design.
- Trained co-workers on unstructured meshing using Pointwise, and aerodynamic shape optimization using the SU2 CFD suite.

01/07/2017 – 12/07/2017 Palo Alto, United States

AERODYNAMICS ENGINEER ZENITH AEROSPACE

- Performed CFD analysis on flight envelope of a high-altitude, high-endurance drone design.
- Constructed and tested 1:12 scale model as a proof of concept and to secure funding.

01/01/2016 – 20/06/2016 Stanford, United States

UNIVERSITY TEACHING ASSISTANT STANFORD UNIVERSITY

- Taught an introductory on Mechanics to two 20-student discussion sections.
- Designed and led hour-long sessions, twice a week to help students better understand concepts taught in the lecture.

EDUCATION AND TRAINING

20/09/2015 – 01/06/2021 Stanford, United States

DOCTOR OF PHILOSOPHY, AERONAUTICS AND ASTRONAUTICS Stanford University

Website https://www.stanford.edu/

20/09/2015 – 20/06/2017 Stanford, United States

MASTER OF SCIENCE, AERONAUTICS AND ASTRONAUTICS Stanford University

Website https://www.stanford.edu/

23/08/2011 – 30/05/2015 Ithaca, United States

BACHELOR OF SCIENCE, MECHANICAL ENGINEERING Cornell University

Website https://www.cornell.edu/

LANGUAGE SKILLS

Mother tongue(s): **ENGLISH** | **HINDI**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
GERMAN	B1	B1	B1	B1	B1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

DIGITAL SKILLS

Linux | Python | MATLAB | C++ | LaTeX (very good) | Git | Microsoft Office

PUBLICATIONS

2023

Life Cycle Emissions of the Decarbonization Options for Aviation.

J. Mukhopadhaya, N. Pavlenko. EM Magazine, July Issue (2023)

2023

A Roadmap for Decarbonizing California In-state Aviation Emissions

N. Pavlenko, J. Mukhopadhaya

2022

Considerations for the ReFuelEU Aviation Trilogue

C. Baldino, J. Mukhopadhaya

2022

Performance Analysis of Regional Electric Aircraft

J. Mukhopadhaya. International Council on Clean Transportation. Washington, D.C. (2022)

2022

Vision 2050: Aligning Aviation with the Paris Agreement. International Council on Clean Transportation

B. Graver, X.S. Zheng, D. Rutherford, J. Mukhopadhaya, E. Pronk. ICCT. Washington, D.C. (2022)

2022

Performance Analysis of Evolutionary Hydrogen-Powered Aircraft

J. Mukhopadhaya and D. Rutherford. International Council on Clean Transportation. Washington, D.C.