

ANAMIKA MALLA

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EDUCATION

Ph.D.	Texas Tech University , Wind Science and Engineering	2022 – Present
MSc	Shanghai Jiao Tong University , Civil Engineering	2020
BE	Tribhuvan University , Civil Engineering	2015

RESEARCH EXPERIENCE 2022 – PRESENT

Research Assistant, Texas Tech University , Lubbock, USA	2022– Present
<ul style="list-style-type: none">Carrying out experimental simulations in WARD-type Tornado simulator to calculate the pressure of stationary and translating tornado-like flows using Omni probe and 4-hole Cobra Probe with a data acquisition system.Performing numerical simulation using Computational Fluid Dynamics (CFD) of the effect of tornado-like vortices on low-rise buildings.	
Research Assistant, Shanghai Jiao Tong University , Shanghai China	2017 –2020
<ul style="list-style-type: none">Performed parametric study of the effect of curvature radius and cant angle of winglets on the aerodynamic performance of H-type Vertical Axis Wind Turbine using CFD; optimum shape has 10% increase in power performance.Investigated wake-induced vibration interference of square cylinders.	

PUBLICATIONS AND CONFERENCES

- Q. Chen, **A. Malla**, J. Kang, H. Zhang, X. Wu. (2024). Laboratory Study of Tornado-Like Loading on a Low-Rise Building Model. https://simcenter.designsafe-ci.org/media/filer_public/c3/9c/c39ccaf6-0716-4b36-9463-ad621328cde0/comp_symposiumposter_2024_chen.pdf
- A. Malla**, J. Zhang, X. Xiang, W. Hughes, H. Pham, A. Melaku. (2023). Mitigating Wind Loads on Tall Buildings by Aerodynamic Shape Modification: a CFD-based Comparative Study. DesignSafe CI. <https://doi.org/10.17603/ds2-0253-3916>
- Malla, A., Han,Z. and Zhou, D. (2020). Effect of the curvature radius of a winglet on the power augmentation of Straight Blade Darrieus Wind Turbine ,IOP Conference Series: Earth and Environmental Science (EES) (ISSN:1755-1315)
- Han, Z., Zhou, D., Malla, A., ..& Bao, Y. (2018). Wake-induced vibration interference between a fixed square cylinder and a 2-DOF downstream square cylinder at low Reynolds numbers. Ocean Engineering, 164, 698-711.

PROFESSIONAL EXPERIENCE

Structural Engineer, Universals Geo-Spatial Solutions , Katmandu, Nepal	March 2020 -Aug 2022
<ul style="list-style-type: none">Design and structural analysis of residential buildings.	
Instructor: SAT, TOEFL and ILETS, KIEC Learning Institute , Kathmandu Nepal	Sept 2021-Aug 2022
<ul style="list-style-type: none">Prepared SAT (Math &English), TOEFL,IELTS course averaging 30 students per six weeks; Conducted mock exams.	
Civil Field Engineer, Nepal Youth Foundation , Katmandu, Nepal	May -Aug 2017
<ul style="list-style-type: none">Rehabilitated “Fulchowki Ma Vi” middle school after April 2015 earthquake with Projects Abroad US	
Civil Engineer, CE Constructions Pvt. Ltd. , Katmandu, Nepal	2016-April 2017
<ul style="list-style-type: none">Supervised site construction of commercial building with rainwater harvesting tanks and pathways, filtration & recycling tank, green roof, solar embedded roofs; Prepared estimation, billing and drawing drafts.	
Civil Engineer, ADM Carto Consult Pvt. Ltd. , Katmandu, Nepal	2014-2015
<ul style="list-style-type: none">Created a digital database of all hydropower stations of Nepal using GIS for Department of Electricity Development, Government of Nepal.	

AWARDS AND HONORS

Tau Beta Pi Engineering Honor Society	2023
Winner, 2023 NHERI COMPUTATIONAL ACADEMY	July 2023
Travel grant awarded from National Science Foundation (NSF)	July 2023
Chinese Scholarship Council – Type A	2017-2020

SKILLS| TECHNICAL

OpenFoam, Salome, STAR-CCM+, UG-NX CAD, MATLAB, Python, Techplot, Origin, Autodesk AutoCAD, Etabs,ArcGIS.
Languages English| Nepali |Hindi |Mandarin