ATHARVA RAJESH KULKARNI

+91 744 777 2412 \$\rightarrow\$ Lecco, Italy

atharvarajesh.kulkarni@mail.polimi.it & Linkedin

Civil engineer focused on structural health monitoring, parametric modeling, and resilient infrastructure, with international experience across academia and industry.

EXPERIENCE

Project Research Assistant

Apr 2022 - Jul 2023

Indian Institute of Technology Bombay, Mumbai

Design, optimization and tests for bamboo telecommunication towers.

Senior Analyst Jul 2021 – Oct 2023

Hone Structural Health Monitoring, Mumbai

Custom tools for vibration analysis focussed on axially tensioned members.

Structural Design Engineer

Jul 2021 - Apr 2022

Nandadeep Designers, Aurangabad

Design of masonry roofs while improving constructability through geometric simplification.

NOTABLE PROJECTS

SHM of Steel Gantry. Monitoring and assessment of gantry girders at Maruti Suzuki.

TMS Form Finding. Grasshopper plug-in for tensile membrane structure optimization.

Wire Arc Additive Manufacturing. Volunteered at IndexLab for Wire Arc Additive Manufacturing studies.

PUBLICATION

A R Kulkarni and V V Nalawade, "Construction and Analysis of Brick Masonry Dome in Lime Mortar without Form Work", Journal of Ceramics and Concrete Sciences (e-ISSN: 2582-1938), vol. 4, no. 3, pp. 23–29, Dec. 2019, doi: 10.5281/zenodo.3570369.

SKILLS

Technical Structural Health Monitoring, Parametric design, Masonry and bamboo structures

Software Ansys MAPDL, Abagus, Grasshopper, Staad.Pro, AutoCAD, ArcGIS, OZone, Python, Matlab

Soft Problem-solving, Communication, Teamwork **Languages** English, Hindi, Marathi, *basic German and Italian*

EDUCATION

MSc, Civil Engineering with Risk Mitigation

Pursuing

Politecnico di Milano

Key Coursework: Structural Dynamics, Retrofitting, Residual Capacity Analysis

BTech, Civil Engineering (CGPA 8.2)

Jul 2021

Dr BATU, Maharashtra

REFERENCES

Prof Siddhartha Ghosh (IIT Bombay): sghosh@civil.iitb.ac.in

Dr Mahesh Varma (Nandadeep): mnvarma@nandadeep.org

Bhumik Halani (Hone SHM): admin@honeshm.com