

# AHMAD SAUD MASOOD

Environmental and Land Planning Engineer

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Willing to Relocate

- Career profile** Prudent and result-oriented Environmental Engineering graduate researcher from Politecnico di Milano, Italy. Proactively, seeking a relevant industrial or research-oriented position/internship relevant to my extensive experiences. My interests lie in product life cycle assessment, sustainable energy, fluid system modeling, environmental data analysis, and health and safety.
- Work experience**
- Teaching Assistant** **July 2017 - July 2018**  
**ACN College of Engineering & Management Studies, Aligarh, India. AKTU Code - 339,**
- Instructed Strength of Material, Design of the Concrete Structure, and Environmental Engineering to undergraduate students in the department of civil and environmental engineering.
  - Manage environmental engineering lab and monitor/train 3 B.tech students.
  - Organized a field visit for B.tech. Civil 3<sup>rd</sup>-year students to the Kasimpur Power Plant, Aligarh on 15-16 October 2017.
- Civil Engineer (1 year, Construction of Government and Private Buildings)** **June 2016 - June 2017**  
**M/S Singh Construction India ('A' Class Govt. Contractor), Prathiba Colony Phase II, Aligarh (U.P.) 202001**
- Supervised construction operations on-site in accordance with government policies and regulations and IS codes.
  - Did feasibility assessment and site inspection; conducted reports; Highlight criticalities on the site.
  - Worked closely with architects and other professionals for consideration of the environment in design, construction, and operations; manage budgets, resources, and deadlines.
  - Actively contributed to assigned activities to ensure that the customer's requirements are fully understood.
- Civil Engineer (2 months) - Internship** **June 2015 - July 2015**  
**Fedders Lloyd Corporation Limited, Kalandi Kunj, New Delhi, India**
- Civil work for construction of metro depot cum workshop at Kalandi Kunj of Delhi Metro Phase III.
  - Conducted construction material tests at a construction site such as Compressive Strength test, Efflorescence test, Slump test, Vibration test; Did estimation and costing, Bar bending schedule, drawing interpretation.
- Education**
- MSc. in Environmental and Land Planning Engineering (Track: Sustainability)** **2019- 2022**  
**Politecnico di Milano, Milan, Italy**
- Master's Thesis (9 months):** Modelling of Sorption processes in porous media through trajectory-based Spatial Markov Model (tSMM).
- Predicted transportation of particles with delays due to surface adsorption/desorption in a porous media.
  - Used upscaling technique to analyze the reactive transport phenomena of porous media use in the filtration system, battery membrane, plant science, biological tissues, etc.
  - Used random walk pore-scale Lagrangian simulation or direct numerical simulation (DNS) model to compare the results and efficiency with proposed model (tSMM) which is 10 times faster than DNS model.
  - Modified models and Analyze data set of 200 million particles based on travel time, number of bounce, inlet, and outlet positions of the particles in the periodic geometry using breakthrough curve.
  - Compared different geometries of porous media based on a number of hits using mean and standard deviation; used MATLAB (model generation, data analysis, visualization) & MS-EXCEL.
- Bachelor of Technology (B.tech.) in Civil Engineering** **2012-2016**  
**DR. A.P.J. Abdul Kalam Technical University, India**
- Bachelor's Thesis (7 months):** Analysis and design of water supply distribution system of a Colony in Jagriti Vihar Scheme no. 11, Meerut (Government Project).
- Used Hardy Cross Iterative method for designing and analyzing flows in a pipe network system where the inputs and outputs are known; Used MATLAB to run the iterations, and satisfy demand and supply of water based on the distribution system and future perspective.

**Educational projects**

- **GROUNDWATER HYDRAULICS (03/2020-12/2020):**  
Explored flow and transport conditions in **Selby aquifer, England**; Geostatistical analysis of the aquifer under a variety of variogram models.  
Competencies used: Groundwater Vistas, SGEMS, MATLAB, MS Excel.
- **AIR POLLUTION “A TICKING TIME BOMB”. (09/2019 – 12/2019):**  
Deal air quality index, EU air quality, and effects of Air Pollution on climate change, human health, and ecosystem; A case study on Air Pollution in New Delhi.

**Certifications**

- Extensive training and online courses on –**
- Environmental Health the Foundation of Global Public Health – University of Michigan (10/06/2022)
  - Project Management Beyond planning and control – Politecnico di Milano (04/06/2022)
  - Safety in the Utility Industry – The University of Buffalo, The state university of New York (08/05/2022)
  - Water Education for Sustainability and Global Citizenship – Cap-Net, UNESCO (13/11/2021)
  - Introduction to Programming with MATLAB – Vanderbilt University (05/05/2021)
  - Environmental Law and Policy – ICFAI Law School, Dehradun (24/05/2020).
  - Earthquake disasters and their mitigation – Aligarh Muslim University (20 – 21 May 2020).
  - The Age of Sustainable Development – by economist, and public policy analyst Professor Jeffrey Sachs (15/12/2019)

**Skills Technical skills**

**-Model generation, data analysis, data visualization, and Simulation & Modeling** (by using MATLAB for the last 5 years), **-Life cycle assessment of the product** (did LCA of different products and compared similar products with proper report generation using OpenLCA), **-Project Management** (have strong knowledge about stage-gate and agile project management strategies), **-Planning** (did project on Urban renewable Planning, Proposed a model to re-establish an abandoned Porta Romana Yard in Milan Italy), **-Construction** (have more than 1 year of industrial experience as a Civil Engineer), **-Environmental Legislation and regulations** (gained knowledge of EU Directive 2008/98, new Circular Economy Package (EU, 2018), ISO 14040: 2006, ISO 14044: 2006 in a project (case study) and in a course Solid Waste Management), **-Design of multi-stories building** (using Autocad, Sketchup, Staad-pro).

**Interpersonal skills:**

Complex Problem-solving (Used during different educational projects and industrial projects), communication skills (interacted with clients, coworkers, and architects), critical thinking, decision making, good team player (lead different projects with teams), multitasking, and time management.

**Software skills:**

MATLAB, OpenLCA, MS-Office (Excel, PowerPoint) & Ms-Project, QGIS, AutoCAD, Staad pro, Etabs, SimaPro, Cropwat 8.0, Climewat 2.0, AQTWSOLV, Groudwater Vistas

**Language skills**

- English (C2)
- Italian (A2)
- Hindi/Urdu (Native)

**Achievements**

- Graduate Aptitude Test in Engineering (GATE 2018) Qualified with 89.42 percentile (selection rate~15%).
- Awarded Merit Scholarship for four consecutive years by DR. A.P.J. Abdul Kalam Technical University, India.
- Awarded Diritto allo Studio Universitario Scholarship in Politecnico di Milano for 2 consecutive years.

**Publication**

- Chapter: 2 (Accepted) ‘**Treatment scenario in various countries-current situation**’ in a book ‘**The Treatment of Pharmaceutical Wastewater**’, going to be published at **Elsevier** Platform. ISBN: 9780323991605, Publication Date: 01-Jan-23
- Research paper on “**Minimizing Vitamin A Deficiency in two Populated States of India i.e., Uttar Pradesh and Bihar by a Suggested Diet Change**” Published by INTERNATIONAL JOURNAL FOR INNOVATIVE RESEARCH IN MULTIDISCIPLINARY FIELD (IJIRMF). ISSN: 2455-0620 Volume - 7, Issue - 10, Oct – 2021