

Mohammad Nikfarjam

BUILDING & ARCHITECTURAL ENGINEER

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PROFESSIONAL SUMMARY

Resourceful and highly motivated near-graduating Master's student in Building and Architectural Engineering (Politecnico di Milano) seeking a challenging long-term internship at S.C.E. Project. Passionate about integrated design and project management, with developing expertise in BIM, Autodesk Revit, and AutoCAD, eager to contribute to executive and construction design projects. Proven collaborator with strong analytical skills and practical experiences gained through architectural and engineering internships. Ready to learn and support S.C.E. Project's dynamic, multidisciplinary team in Milan.

AREAS OF EXPERTISE

PROFESSIONAL SKILLS Integrated Design Principles | Teamwork & Collaboration | Communication Skills (Fluent in English) | Critical Analysis

TECHNICAL SKILLS Autodesk Revit (Modeling, Families) | AutoCAD 2D/3D | BIM Workflow Management | Technical Drawing & Detailing

PROFESSIONAL EXPERIENCE

P2E Business student project, Saint-Gobain | Nantes, France

Sep 2023 – May 2024

Collaborated as part of a student team at Centrale Nantes in partnership with Saint-Gobain, conducting a comprehensive technical and financial evaluation for replacing IE1/IE2 motors with next-generation IE3/IE4 motors, aimed at improving energy efficiency in Eurocoustics' production processes.

- Analyzed energy efficiency strategies for industrial motors, comparing replacement (IE3/IE4), rewinding, and VSD options to support Saint-Gobain's goal of reducing CO2 emissions by 33% by 2030.
- Performed technical evaluations and cost-benefit analyses demonstrating potential annual savings of up to €8,800 and over 3.9 tonnes CO2eq per motor by upgrading legacy IE1/IE2 units to IE4 technology.
- Contributed to a comparative study concluding that motor replacement offered the most viable path to achieve significant decarbonization targets compared to motor rewinding or solely adding VSDs.

Structural and Geotechnical Testing Intern, Asa Tekin Arvin Toos Company | Mashhad, Iran May2020–Aug2021

Laboratory focused on testing concrete and geotechnical soil compliance with national building codes.

- Executed structural integrity assessments through rigorous welding inspections and concrete strength testing protocols.
- Analyzed soil samples and evaluated foundation suitability, providing key geotechnical data for civil construction project planning.

Structural Engineer Intern, Kohan Boom Pars Company | Mashhad, Iran

Sep 2019 – Aug 2019

Construction engineering company, the internship project focused on a large-scale residential project.

- Performed on-site structural and safety inspections for a large-scale residential palazzo project, identifying hazards and verifying compliance with building codes using site survey data.
- Utilized AutoCAD for structural mapping and updating technical drawings based on inspection findings and site conditions.
- Contributed to the development of construction plans and technical reports, incorporating inspection results and detailed compliance documentation.

----- EDUCATION -----

- Master of Science in Building and Architectural Engineering**, Politecnico di Milano, *Milan, Italy* Sep 2022 - Present
- Relevant Coursework: Integrated Building Design, Facade Engineering, Design of Structures, Building Services and Building Energy Modeling, Building Process and Information Management.
- Erasmus Program in Master of Engineering**, École Centrale de Nantes, *Nantes, France* Sep 2022 -May 2024
- Relevant Coursework: Continuum Mechanics, Thermodynamics, Product Design and Development, Energy, Environment and Climate Challenges.
- Bachelor of Science in Civil Engineering**, Semnan University, *Semnan, Iran* Aug 2016 – Jun 2021
- Relevant Coursework: Structural Analysis, Modelling of Structures, Project Evaluation and Cost Estimation, Construction Equipment.

----- LANGUAGES -----

English: Fluent (C1)
French: Conversational (B1)
Italian: Basic (A2)
Persian: Native

----- AREAS OF EXPERTISE -----

BIM -3D MODELLING	Rhinoceros Grasshopper Revit SketchUp AutoCAD
BUILDING ENERGY MODELLING & LCA	One Click LCA IESVE THERM + WINDOW software
STRUCTURAL MODELLING & ANALYSIS	SAP2000 ETABS Ansys FEM Mepla Midas
PROGRAMMING AND SCRIPTING LANGUAGES	FORTRAN C++
GRAPHICS AND DESIGN SOFTWARE	Adobe Photoshop Illustrator InDesign Lightroom premiere pro
OFFICE PRODUCTIVITY TOOLS	Microsoft Office package: Microsoft Word, Excel, PowerPoint, Access Google Workspace (Docs, Sheets, Slides)