ANOOSHIRVAN MOSTMAND

Energy Engineer & Data Scientist

AnooshirvanMostmand.com



WORK EXPERIENCE

Energy Engineer | Data Scientist Researcher MANAGE 5.0 EU project

March 2024 - Dec 2024

 thesis as "Integrating BIM, BEM, and Deep Learning for Enhanced Energy", in order to Leverage research skills to develop data-driven solutions focusing on energy forecasting models for improved decision-making. Forecasting in Industrial Facilities: A Multi-Model Approach for Predictive Analytics and Real-Time Visualization

Apprenticeships As Energy Engineer Enel Green Power, SACAL Società Alluminio Carisio S.p.A., Hitachi Rail

₩ Sep 2021 - Jan 2023

- Collaborated on various projects aimed at reducing environmental impact and enhancing sustainability, All projects were held by Clik from Challenge at Politecnico di Torino.
- Worked with Enel Green Power on circularity and sustainability assessment of PV plants (3rd and 4th generation of PV cells)
- Proposed the production of CAC as a by-product in sustainable aftertreatment in collaboration with SACAL and Energy Minimization overview aluminum and cement production units.
- Evaluated a public transport system with a focus on sustainability with Hitachi Railway, Developed dashboards for decision-making based on green mobility indexes.

Techno-economic Analysis

Data Analysis

Energy Assessment

Dashboarding

Energy Engineer Xeno Enterprise

April 2021 - September 2023

- work in engineering division for the Xeno Enterprise regarding energetic and mechanical projects and develop energy department in this division.
- collaborated on Green steel Project at Xeno in (Slag and Mud recycling process,Integration of H2 in Steel Co).
- work in R&D department for the engineering division.

LESSONS AND PROJECTS

Comprehensive Techno-Economic Analysis of: CAES,biogas-based SOFC system in WWT,Solar Thermal System in Domestic Application

• Comprehensive Techno-economic evaluation of named projects in real cases and provide 4E frame work on them.

Pre-design and Re-design and Re-powering of WEC and a Wind Farm

- Pre-design of a wave energy converter in Bulgaria
- Re-Design and Repowering wind farm in Roio del Sangro, abruzzo, Italy.

Degradation Mechanism of RSOFC(Study, Modelling)

 literature review and study over Degradation Mechanism of RSOFC, modelling Via COMSOL and Matlab.

COMSOL

MATLAB

EDUCATION

Master's degree in Energy and nuclear Engineering- Renewable Energy System

Polytechnic University of Turin-PoliTo

2024

♀ Turin

LAB-EXPERIENCE

Data Science - Developer

- Data Scientist & ML engineer
- Python Developer in the EU project of MAN-AGE 5.0 (Al-Integerated Energy management application for stellantis Auto-manufacturing Facility)

Mechanical Lab

- CAD & CAM.
- Mechanical testing and certification of the workshop.
- Marine mechanic (ICE engine, steam tanks, hydraulics and pumps) & maintenance.

Electrical Lab

- PV system design and grid connection traineeship(PVsyst), Iran TVTO.
- BMS & BAS Iran TVTO (Smart building)

HSE-MS

 HSE-MS and Laboratory and workshop Standardization traineeship in Iran TVTO.

SKILLS

Programming

- Python.
- Julia.
- Matlab.

Design

- CAD(AutoCad, SolidWorks & Revit).
- Script-based CAD (Blender, CadQuery)

Simulation

- Modelica & Simulink.
- Aspen+
- FEM(COMSOL, Python)

Python

- ML & DL.
- Computer vision.
- MLOps.

LANGUAGES

English Italian German Advanced Intermediate Intermediate