Mohammad Vandad

CONTACT INFORMATION

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Genova | Italia

ACADEMIC BACKGROUND

Master of Science in Environmental Engineering
University of Genova (UniGe)
Sep 2023 - Present
Genova | Italy

Bachelor of Science in Chemical Engineering
Amirkabir University of Technology (AUT)
Project Title (II): Designing a sulfuric acid unit with a concentration of 98.5% with a capacity of 1000 tons per day. (Under the Supervision of Dr. Rouein Halladj)
Project Title (I): Simulation of olefins plant separation sequence, based on ethane vapor cracking technology. (Under the Supervision of Dr. Hamid Reza Norouzi)
Sep 2017 - Jun 2022
Tehran | Iran

Pre-University & High School Diploma in Mathematics and Physics
Shahid Beheshti High School (National Organization for Development of Exceptional Talents)
Sep 2015 - Jun 2017
Mazandaran | Iran

PROFESSIONAL EXPERIENCE

Internship
University of Genova (Under the Supervision of Dr. Garbarino)
Since Aug 2024

Assistant to the Manager
Melal Digital Entertainment Hub
Summer 2022

Internship
IRANOL Oil Company
Summer 2021

Academic Advisor Private Tutor in STEM and English (Pro Bono)
Summer 2017 - Winter 2023

CORE SKILLS

Technical Software:

- ICDL
- Aspen HYSYS
- DWSIM
- HTRI
- Design-Expert
- *Aspen PLUS*
- AutoCAD
- COMSOL Multiphysics
- ANSYS Fluent
- SimaPro
- ANSYS Chemkin
- ArcGIS
- OpenLCA

Numerical Analysis Software:

- MATLAB
- Python
- C
- Minitab

Language Skills:

- Persian (Native)
- English C1 Level, IELTS overall band score of 7.5 (R: 7.5, L: 8.0, S: 7.0, W: 6.5)
- Italian (B1 Level, learning)

ACADEMIC PROJECTS

- **"Controversial Usage of Renewable Sources in the Three Gorges Dam"** Sustainable Planning course, Under the Supervision of Dr. Francesca Pirlone & Dr. Ilaria Delponte. (Winter 2024)
- **"Exploration Report of Reed Mines"** Numerical Cartography and GIS course, Under the Supervision of Dr. Bianca Federici. (Spring 2024)
- **"LCA Study and Comparison of Different Types of Containers for Fruit Juice"** Life Cycle Assessment and Ecodesign course, Under the Supervision of Dr. Adriana Del Borghi & Dr. Luca Moreschi. (Spring 2024)
- **Rewriting "MATLAB codes for finding roots, integrals, and solving machines with matrices from Chapra's book,"** Numerical Methods for Chemical Engineers course, Under the Supervision of Dr. Javad Ahmadpour. *(Fall 2022)*
- **Rewriting the MATLAB code of the article "Photocatalytic degradation using ZnO for the treatment of RB 19 and RB 21 dyes in industrial effluents and mathematical modeling of the process,"** Optimization of chemical processes course, under the supervision of Dr. Seyed Reza Shabanian. *(Fall 2022)*
- **Rewriting the MATLAB code of the article "Predicting the surface tension of mixtures of fatty acid ethyl esters and biodiesel fuels using UNIFAC activity coefficients,"** Applied thermodynamics of fluid-phase equilibria course, under the supervision of Dr. Mostafa Lashkarbolooki. *(Fall 2022)*
- **"Optimizing and analyzing a case study with the help of Design-Expert,"** Optimization of chemical processes under the supervision of Dr. Seyed Reza Shabanian. (Fall 2022)
- **"Methods of Adsorption of Carbon Dioxide and Its Conversion Into Useful Substances,"** Separation Processes (II) course, Under the Supervision of Dr. Mansooreh Soleimani. *(Fall 2021)*
- **"Economics and Process Design of Biofuel Production from Bagasse,"** Principles of Economics and Process Design course, Under the Supervision of Dr. Mansooreh Soleimani. *(Fall 2021)*
- **"Process Description of IRANOL Oil Company,"** Training course, Under the Supervision of Dr. Mehrdad Mozaffarian. *(2021)*
- **"Sweetening of Gas After Extraction With Methyl diethanolamine: An Approach Based on Unit 101 of South Pars Refinery of Iran,"** Special Topics (Gas Processes) course, Under the Supervision of Dr. Mostafa Keshavarz Moraveji. *(2021)*
- **"Review on Recent Advances in Adsorptive Desulfurization,"** Petroleum Refining Engineering course, Under the Supervision of Dr. Habib Ale Ebrahim. *(2021)*
- **"Simulation Syngas Production From Regasified Liquefied Natural Gas Using Aspen HYSYS and DWSIM,"** Chemical Engineering Software Laboratory course, Under the Supervision of Dr. Ebrahimi Haratmeh. *(2020)*
- **"Adsorption refrigeration cycles,"** Petrochemical Processes course, Under the Supervision of Dr. Rouein Halladj. *(2020)*
- **"Simulation of 2 Dimensional Unsteady State Heat Transfer Using MATLAB,"** Mathematical Modelling in Chemical Engineering course, Under the Supervision of Dr. Bahram Dabir. *(2020)*
- **"An Ethical Overview on Recent Changes in Sex and Gender Identities,"** The Philosophy of Ethics course, Under the Supervision of Dr. Mohammad Hossein Mirmohammadi. *(2020)*
- **"Calculating AFT With Regards to The Second Law of Thermodynamics With Help of ANSYS Chemkin,"** Principles of Combustion Engineering course, Under the Supervision of Dr. Fariborz Rashidi. *(2019)*
- **"Technical and economic evaluation of Iranian seawater desalination using the reverse osmosis process (RO) and multi-stage sudden distillation process (MSF)"** Professional Skills in Chemical Engineering course, under the supervision of Dr. Sayed Alireza Hosseinzadeh Hejazi. *(2019)*
- **"An Introduction to Centrifugal Pumps,"** Fluid Mechanics II course, Under the Supervision of Dr. Bahram Dabir. *(2019)*
- **"A HAZOP Study Based on A Plant-wide Industrial Process Control Problem Written By J.J.Downs and E.F.Vogel,"** Process Safety course, Under the Supervision of Dr. Ali Mohammad Sahlodin. *(2019)*

*** All projects were non-commercial and solely intended for educational purposes.

Feb. 2025