Milad Tulabi

Curriculum Vitae

EDUCATION

2015 to 2018 **Masters of Science in Chemical Engineering - Environmental Engineering**
School of Chemical Engineering, College of Engineering, University of Tehran, Tehran, Iran
- Supervisor: Prof. Sh. Fatemi

2012 to 2015 **Bachelor of Science in Chemical Engineering**
School of Chemical Engineering, College of Engineering, University of Tehran, Tehran, Iran
- **Ranked** 1st among B.Sc. students
- Supervisor: Dr. M.A. Aroon

RESEARCH INTERESTS

- Machine Learning / Deep Learning
- Process Design / Process System Engineering
- Modeling and Simulation

SKILLS

Computer
- Aspen Hysys: Expert
- Aspen Adsorption: Expert
- SuperPro designer: Intermediate
- COMSOL multiphysics: Intermediate
- Minitab, Design Expert: Advanced
- MATLAB: Intermediate
- Python: Intermediate
- C++: Intermediate
- git: intermediate

Laboratory
- Hydro- and Solvo-Thermal Synthesis and characterization of Imidazolate-based MOF
- Construction of adsorbent and catalytic bed for batch and continuous configuration / fixed and fluidized bed
- Analysis with XRD, FESEM, BET, GC results

Language:
- English: Advanced - TOEFL iBT (2015): 89
- Persian (Farsi): Mother Tongue

RELATED EXPERIENCES

Since July 2022 **Assistant Product Manager / Python Developer at Simurgh (a social media)**
Description: In this company, we developed a social media to connect change seeking people in education field
Responsibilities:
R 1: Customer Analysis
R 2: Implement and Test Features
R 3: Product Analysis

Sep. 2019 to Feb. 2022	**Research Assistant at CCERCI**
	Description: Aim of the project was to lower the energy consumption of the MTO process by developing a core-shell catalyst
	Responsibilities:
	    R 1: Synthesis Industrial Catalyst (SAPO-34)
	    R 2: Test Run the catalyst in Fluidized Bed
	    R 3: Synthesis Core-Shell SAPO-34
	    Seminar 1: Methanol To Light Olefin Conversion: Process, Technology and Catalysts
	    Seminar 2: Methanol To Light Olefin Conversion: Industrial Catalyst and
	    Core-Shell-based Developments

May 2019 to Jan. 2020	**Research And Development Specialist at Ebtekar Avaran-e Amn:**
	Description: Aim of the project was to develop a new car care detergent
	Responsibilities:
	    R 1: Detergent Formulation Tests
	    R 2: Constructing R&D Lab. (Equipment and Precursor Preparation)

April 2016 to Aug. 2018	**Research Assistant at Adsorption, Modeling and Nanomaterials Laboratory**
	Description: Aim of the project was to develop a ZIF-based paraffin selective adsorbent to separate light olefin from light paraffin
	Responsibilities:
	    R 1: Synthesis ZIF-8 and ZIF-67 (using Hydro- and solvothermal methods)
	    R 2: Constructing Static and Dynamic Adsorption System and Test Behavior of Adsorbents
	    R 3: calculate MTC, diffusion coefficient, adsorption coefficients and enthalpy of adsorption using mathematical modeling experiments by MATLAB
	    R 4: calculate purity and recovery of ethylene in VSA and PSA separation processes using Aspen Adsorption

July 2015 to Sep. 2015	**Intern, Research Institute of Petroleum Industry** **Report:** Review on Applications of Hybrid Nanofluid for Heat Transfer Enhancement

AWARDS

2016	Titled as an "elite" student and exempted from taking the Nation-wide University Entrance Exam for Graduate Studies due to being among top 10% of bachelor students in the School of Chemical Engineering, University of Tehran, Tehran, Iran.
2015	Awarded the Faculty Of Engineering (FOE) prize for being ranked 2nd among senior students of the School of Chemical Engineering, University of Tehran, Tehran, Iran
2014	Awarded the Faculty Of Engineering (FOE) prize for being ranked 2nd among sophomore students of the School of Chemical Engineering, University of Tehran, Tehran, Iran

TEACHING ASSISTANT

Statistics and Experiment Design
Advanced Mathematics
Mass Transfer phenomena
Heat Transfer phenomena
Fluid Mechanic

LEADERSHIP AND ACTIVITIES

Education-related non-profit organization, Tehran, **Digital Marketing Manager**
Amateur Astronomers Association, University of Tehran, **Member**
4th National Congress on Hydrogen and Fuel Cell, University of Tehran, **Member of the Executive Team**
Tolou Charity, Rasht, **Volunteer**

Tornado Chem-e-Car Team, University of Tehran, **Team leader**
University of Tehran, Application of Mixed Matrix Membrane in gas separation, **Student**
University of Tehran, Simulation of Sulfuric Acid Plant Production by Aspen Hysys, **Student**
University of Tehran, Separation Process of Xylenes Review and Simulation by Aspen Hysys, **Student**

WORKSHOPS AND COURSES

Hands-on Introduction to Linux Commands and Shell Scripting, IBM
Getting Started with Git and GitHub, IBM
Python for Data Science, AI & Development, IBM
Introduction to Software Engineering, IBM
Supervised Machine Learning: Regression and Classification - Coursera
Machine Learning with Python - Maktabkhooneh
Advanced Learning Algorithms - Coursera
Intro to Deep Learning, Kaggle
Intro to Game AI and Reinforcement Learning, Kaggle
Pandas, Kaggle
Intermediate Machine Learning, Kaggle
Intro to Machine Learning, Kaggle
Python, Kaggle
Machine Learning by Andrew Ng, Coursera
Process Design, Research Institute of Petroleum Industry
Introduction and Recognition of Nanostructures. University of Tehran