Ali Jafari

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Education

2022_10 – 2024_05

Master of Science in Biotechnology Engineering
Amirkabir University of Technology (AUT), Tehran, Iran (Ranked 7th best global universities in Iran based on U.S.News)
Note: Received full scholarship from Amirkabir University of Technology (Tuition Waiver)
CGPA: 16.18/20
Thesis: Modeling and prediction of pretreatment method on VFA production from lignocellulosic biomass by use of artificial intelligence
Supervisor: Dr. Narges Fallah

2016_09 – 2020_09

Bachelor of Science in Chemical Engineering
University of Tehran (UT), Tehran, Iran (Ranked 1st best global universities in Iran based on U.S.News)
Note: Received full scholarship from University of Tehran (Tuition Waiver)
CGPA: 16.04/20
Thesis: Research and study of antiviral and antibacterial properties of chemical compounds of copper
Supervisor: Dr. Abdolmajid Bayandori Moghaddam

Selected Courses

Computer Programming 19/20	Differential Equations 20/20
Calculus 1 19.08/20	Calculus 2 18.04/20
Thermodynamics 1 18.5/20	Industrial Drawing 1 20/20

Awards & Honors

- Ranked 22nd in the Iranian university entrance exam for a master's degree in biotechnology engineering
- Ranked 1st GPA in academic year 2016-2017

Research Interests

- Machine Learning
- Artificial Intelligence
- Microbial Products
- Bioinformatics

Experience

Teaching Experience

2022_06 - 2022_08 — **Teaching Mathematics, Physics, and Chemistry to High School Students**

2019_02 - 2019-06 — **Teaching Assistant of Application of Mathematics in Chemical Engineering using MATLAB**
University of Tehran, Tehran, Iran

2018_09 - 2019_01 — **Teaching Assistant of Fluid Mechanics Modeling using ANSYS Fluent**
University of Tehran, Tehran, Iran

2017_02 - 2017_06 — **Teaching Assistant in Industrial Drawing using CATIA**
University of Tehran, Tehran, Iran

Industry Experience

2023_03 - Present — **Mid-Level .NET Back-End Web Developer**
Learned: C#.NET, ASP.NET, T-SQL, Clean Code Concepts, Building Maintainable Software, Code Refactoring
Chargoon, Tehran, Iran

2021_09 - 2023_03 — **Junior .NET Back-End Web Developer**
Learned: C#.NET, ASP.NET, T-SQL, Clean Code Concepts
Chargoon, Tehran, Iran

2021_01 - 2021_08 — **.NEt Back-End Web Developer Internship**
Learned: C#.NET, ASP.NET, T-SQL
Chargoon, Tehran, Iran

2019_09 - 2020-10 — **Windows Application Developer**
Learned: VB.NET, VBA, Excel Micro, CATIA
Sarvak Drilling Services, Tehran, Iran

2019_07 -	**Chemical Engineering Internship**
2019_08	**Learned:** Fluid Mechanics Concepts, HSE Concepts, Research and Develop Concepts
	Sarvak Drilling Services, Tehran, Iran

Projects

- **Heat Transfer During Solid-state Fermentation Modeled Mathematically**
  In this project, heat transfer formulas were developed mathematically to model the fermentation heat transfer system.
- **Modeled Simple Waste Water Treatment Process using BioWin**
  In this project, a simple wastewater treatment process was designed and modeled to calculate biological information like COD, BOD, etc.
- **The Thermodynamic Properties of The Water–Ammonia Mixture Modeled by Three Different Approaches**
  In this project, thermodynamic properties of water-ammonia mixture formulas developed and developed formulas used to model the system in MATLAB.
- **Recombinant Human Insulin Production Feasibility Study Written**
  This project's feasibility study of producing recombinant human insulin in Iran was studied.
- **Sarvak Hydraulics Windows Form Application Developed**
  In this project, a Windows form application was developed using VB.NET programming language to calculate the hydraulics properties of mud, cement, and other fluids that are used in oil well drilling. This application is named Sarvak Hydraulics.
- **Rose Essential Oil Production Feasibility Study Written**
  In this project, the feasibility study of producing rose essential oil in Iran was studied and the production process was designed.
- **Fluid Mechanics Modeled**
  In this project, fluid mechanics around some objects are modeled in ANSYS Fluent.

Workshops & Seminars

- **CS50AI**
  Harvard University
  https://cs50.harvard.edu/certificates/cad015f6-1464-4aeb-9a64-0be7fbba699a
  2023-12
- **CS50P**
  Harvard University
  https://cs50.harvard.edu/certificates/cb3abd94-1eca-4fac-b29b-9dd65c92dbf3
  2023-10
- **CS50x 2023**

Harvard University
https://cs50.harvard.edu/certificates/13d354da-b167-4c51-82f6-c7db441e2dc3
2023-09
- **Machine Learning with Python Workshop**
Amirkabir University of Technology, Tehran, Iran
2022-07-13
- **Heat Exchanger Design Workshop**
University of Tehran, Tehran, Iran
2022-02
- **Nanotechnology in topics of (Synthesis, application) Seminar**
Dr. Shahid Chamran's research center of Nanotechnology Guilan branch
2017

Skills

Language Skills
- **English**
The IELTS exam will be taken soon
- **Turkish**
Native language
- **Persian**
Native language

Computer Skills
Software
- Adobe Photoshop
- Adobe Premiere
- EndNote
- Linux
- ANSYS
- BioWin
- Minitab Statistical Software
- Mendeley Reference Manager
- Microsoft Excel
- Microsoft Word
- CATIA
- Microsoft PowerPoint

Programming Languages
- C#.NET
- VB.NET
- PHP
- VBA
- Python
- ASP.NET
- MATLAB
- T-SQL

Hobbies

- Gym
- Trading
- Poetry
- Mountaineering
- Book Reading
- Programming

References

1) Dr. Narges Fallah. Associate Professor, Department of Chemical Engineering, Amirkabir University of Technology, Tehran, Iran
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