Reyhane Ghorbani Nia

Contact Information

Department of Chemical Engineering,
University of Tehran
Personal Website, **GitHub**, **LinkedIn**

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Education

University of Tehran (UT), Tehran, Iran — 09/2018 - 06/2022 (expected)

B.S. in Chemical Engineering (In progress)
GPA (up to now): 16.61/20, The last three semesters: **17.72/20 (3.8/4)**
Advisor: Dr. Omid Tavakoli

Shahid Iranmanesh High School, Kerman, Iran — 2014 - 2018

High School Diploma in Mathematics and Physics
GPA: 19.90/20 (4.0/4.0)

Research Interests

- Bio Sensors
- Drug Delivery(Usage of Liposome)
- Nanoparticles
- Protein Engineering
- Electrochemistry
- Catalysis
- Biotechnology
- Advanced Sensors Usage for Detecting Cancers
- Machine Learning

Relevant Courses

- Engineering Mathematics (19.25/20)
- Application of Mathematics in Chemical Engineering (19.25/20)
- Physical Chemistry (19/20)
- Calculus II (17/20)
- Kinetic and Reactor Design (18.5/20)
- Fluid Mechanics (18.5/20)
- Heat Transfer (17.5/20)
- Fundamentals of Genetic Engineering (18.38/20)
- Differential Equations (20/20)
- Computer Programming (19/20)
- General Microbiology (19/20)
- Transmission and Distribution of Natural Gas (18.75/20)
- Unit-Operation (in progress)
- Process Control (in progress)
- Refining Processes (in progress)
- Biochemistry Engineering (in progress)

Honors and Awards

- Ranked 504^{th} among more than 150,000 participants in the national university entrance exam, 2018

-M.Sc. Admission from Department of Chemical Engineering, University of Tehran. Exempted from M.Sc. university entrance exam as an exceptional talent student, 2021

-Ranked **14^{th}** among 78 students of Chemical Engineering, University of Tehran (up to now)

Research Experience

- **Research Assistant, Adsorption Processes Laboratory, University of Tehran** July 2021
  Research: Applications of Indirect Biosensors in the Detection of Lung Cancer Using Respiratory Exhaust Gases.

- **B.S. Thesis Project: Encapsulating milk-derived Micro-RNAs in lipid nanoparticles (Tentative)** 2021

Work Experience

- **Technical Laboratory Researcher , University of Tehran, Iran** 2021
  Mentor - Dr. Abbas Ali Khodadadi
  Application of indirect Bio-Sensors in the Detection of Lung Cancer Using Respiratory Exhaust Gases

- **Internship Project: Iranian National Algae Culture Collection, University of Tehran, Iran** 2021
  Mentor - Dr. Omid Tavakoli
  Micro-Algae biosensors

Technical Skills

- *Programming Languages*: MATLAB, Python, C/C++
- *Simulation and Design Tools*: Hysis Aspen, Simulink
- *Technical Tools*: LATEX, Microsoft Office

Teaching Assistant Experience

Physical Chemistry,	Spring 2021-Fall 2021
Differential Equations,	Fall 2019
Applications of Mathematics in Chemistry,	Fall 2019

Language Skills

- Persian (Farsi): Native
- English:
  - TOEFL: Reading: 24, Writing: 22, Speaking: 21, Listening: 20, Total: 87 (Tentative)

Academic and Professional References

- Dr. Abbas Ali Khodadadi, `E-mail:`khodadad@ut.ac.ir
  Professor, School of Chemical Engineering, University of Tehran.
- Dr. Omid Tavakoli, `E-mail:`otavakoli@ut.ac.ir
  Assistant Professor, School of Chemical Engineering, University of Tehran.
- Dr. Reza Zarghami, `E-mail:`rzarghami@ut.ac.ir
  Professor, School of Chemical Engineering, University of Tehran.
- Dr. Mojtaba Shariaty Niassar, `E-mail:`mshariat@ut.ac.ir
  Professor, School of Chemical Engineering, University of Tehran.