# H. Reza Mohammadiha

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## Education

***Sharif University of Technology*** *Tehran, Iran*

*Master of Science in Industrial Engineering,* *2020-2023*

GPA: 3.46/4 or 17.05/20

*Thesis*: *Investigating the Application of Game Theory in Pricing and Market Analysis (2023)*

*Supervisor*: Dr. Shokraneh K. Moghaddam

***Sharif University of Technology*** *Tehran, Iran*

*Bachelor of Science in Industrial Engineering,* *2016-2020*

GPA: 3.93/4 or 18.06/20

## Computer Skills

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| ***Digital Literacy*** | *Microsoft Office – Google Cloud – Github – LLM/LRM chatbots* |
| ***Data Analytics*** | *Excel – Python – R – SQL – PowerBI – Tableau - Metabase* |
| ***Machine Learnings*** | *Pandas – Numpy - Scikit-Learn – Gymnasium* |
| ***Simulation Tools*** | *AnyLogic – Anylogistix – Arena* |
| ***Product Development*** | *Figma - Docker – Postman* |
| ***Web Development*** | *HTML – CSS – JS* |
| ***Management Tools*** | *Trello – Jira* |
| ***AI Agent Platform*** | *n8n* |

### Languages

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|---|---|
| ***English*** | *Professional (IELTS: **6/9** - Duolingo: **125/160**)* |
| ***Turkish*** | *Familiar* |
| ***Persian*** | *Native* |

## Honors and Awards

***Won*** Gold medal for sharif university volleyball tournament
Sharif University of Technology, Tehran, Iran, 2020

***Ranked 6th*** Among graduating class of industrial engineering at the end of bachelor's
Sharif University of Technology, Tehran, Iran, 2020

***Ranked 260th*** Among approximately 260,000 participants in the university entrance exam
Iran, 2016

***Certified*** National young mathematicians' association exam held by the University of Waterloo, Canada, 2013

## Experiences

**Saman Insurance** — 8 Months
*Associate BI Developer*

*Saman insurance company provide diverse and creative insurance services to individuals and legal entities with flexible payment options. My role is exploring innovative data frames and building insightful dashboard to analyze the profitability of different fields.*

**Iran Credit Scoring** — 10 Months
*Associate Product Manager*

*Iran Credit Scoring Company develops explainable Artificial Intelligences (XAIs) for the FinTech Ecosystem of Iran. My role was to model technical data pipelines and business workflow to ensure the reliability of system and clarity of machine learning algorithms.*

**Solico Group** — 30 Months

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|---|---|
| *Game Studio Director* | *6 Months* |
| *Strategic Planning Team Member* | *18 Months* |
| *Organization Designer* | *6 Months* |

*Solico Group is a multinational food company. It produces, trades, distributes, and sells food in more than 10 countries. My role was designing organizational charts for different departments and then modeling framework of jobs. After a while I was assigned to manage a talent pool to hunt and help young talent to know the business and find their suitable departments. At the end, I tried to stablish a game studio to integrate gamification project all over the company.*

**Gamein 2021** — 12 Months
*Lead Game Designer*

*Gamein is an academic competition in which participants face business challenges in a simulated market environment. I was like one of founding fathers of this international and academic serious game event in the field of supply chain and business management between Industrial Engineers. We designed, developed and played our game successfully between 964 participants.*

**Gamein 2021** — 36 Months
*Teaching Assistant*

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| • *Product Development and Planning* | *Dr. Shokraneh K. Moghaddam* | *Spring 2022* |
| • *Simulation Languages* | *Dr. Erfan Hassannayebi* | *Spring 2021* |
| • *Discrete Event Simulation* | *Dr. Nafiseh Sedghi* | *Spring 2020* |

## Selected Projects

***Financial Data Analytics for Insurance Profitability*** *2025* *@ Saman Insurance*
*Creating Interactive Dashboards for Product Managers*

This project focused on developing interactive dashboards for product managers, transforming complex actuarial and financial data into actionable visual insights. The goal was to empower managers to monitor key profitability metrics, identify trends in claims and premiums, and make data-driven decisions to optimize product performance and enhance the company's financial health.

***Decentralized Finance (DeFi) use cases*** *2024* *@ Personal Research*
*Exploring use cases of DeFi and smart moneys*

This independent research initiative involved a deep dive into the emerging ecosystem of Decentralized Finance. It explored innovative use cases for blockchain-based financial instruments and analyzed the investment strategies of "smart money" investors to understand the practical applications and future potential of DeFi protocols beyond speculative trading.

***Explainable AI architecture and definitions*** *2023* *@ Iran Credit Scoring*
*Exploring requirements of XAIs for credit scoring*

This project involved researching and defining the core requirements for building Explainable AI (XAI) systems within a credit scoring context. The goal was to move beyond "black box" models by creating an architectural framework that ensures algorithmic decisions are transparent, interpretable, and compliant with regulatory standards, thereby building trust with both regulators and applicants.

***IBM HR analytics employees case study*** *2022* *@ Sharif (Masters)*
*Data driven examining of job burnout triggers*

Leveraging IBM's HR analytics dataset, this academic case study applied data science techniques to examine the multifaceted triggers of employee burnout. Through statistical analysis and predictive modeling, it identified key factors—such as overtime, job role, and employee satisfaction—that contribute to attrition, providing actionable insights for improving workforce retention strategies

***Market Simulation of Gamein 2021*** *2021* *@ Sharif (Gamein)*
*Supply chain pricing mechanism design and balancing*

This project involved designing and simulating a complex supply chain market for a business simulation game. The core challenge was to develop a robust pricing and trading mechanism that would balance the in-game economy, ensuring it was both competitive and sustainable for all players participating in the simulated market environment.

***Hospitals' Beds Allocations for Covid-19 Patients*** *2020* *@ Sharif (bachelor)*
*Game Theoretical Approach with Auction and Matching Model*

Addressing a critical pandemic-era challenge, this research proposed a resource allocation model for hospital beds using a combination of game theory, auction mechanisms, and matching algorithms. The aim was to create a fair and efficient system to optimally distribute scarce medical resources among hospitals and patients, maximizing overall welfare during a crisis.

***Serious Game Design for Learning Supply Chains Contracts*** *2019* *@ Internship*
*At Iran's National Elites Foundation*

At Iran's National Elites Foundation, this project involved designing a "serious game"—a game with an educational purpose rather than pure entertainment. The objective was to create an interactive simulation to teach students and professionals the complexities and strategic implications of different supply chain contracts in an engaging and practical manner.