

# Reza Nopour

PROSPECTIVE STUDENT · MECHANICAL ENGINEER

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“Develop a passion for learning. If you do, you will never cease to grow.”

## Education

### Amirkabir University of Technology (Tehran Polytechnic)

Tehran, Iran

MASTER OF SCIENCE IN MECHANICAL ENGINEERING

Oct. 2020 - Sep. 2022

- Working on Multi-Body Dynamics and Co-Simulation
- CGPA=3.65/4, Last 20 credits **GPA=4/4**

### Imam Khomeini International University

Qazvin, Iran

BACHELOR'S DEGREE IN MECHANICAL ENGINEERING

Oct. 2016 - Sep. 2020

- worked on properties of smart materials as well as Auxetic meta-materials and also, investigation the effect of carbon nanotubes waviness on mechanical properties (Plates, shells, and beams)
- CGPA=3.63/4, Last 4 semesters **GPA=3.96/4**

### National Organization for Development of Exceptional Talents (Sampad)

Karaj, Iran

HIGH SCHOOL DIPLOMA IN MATHEMATICS AND PHYSICS

Oct. 2009 - Sep. 2016

- GPA=4/4**

## Research Interest

•Data Mining

•Machine Learning

•Computer Science

•Mathematical Modelling

•Numerical Methods

•Linear Algebra

## Teaching Experience

### Dynamics of Multi body Systems

Tehran, Iran

AMIRKABIR UNIVERSITY OF TECHNOLOGY (TEHRAN POLYTECHNIC)

Jan. 2022 - Aug. 2022

- Instructor: Dr. Afshin Taghvaeipour

### Mechanical Engineering Design II

Qazvin, Iran

IMAM KHOMEINI INTERNATIONAL UNIVERSITY

Jan. 2020 - Jul. 2020

- Instructor: Dr. Farzad Ebrahimi

### Mechanical Engineering Design I

Qazvin, Iran

IMAM KHOMEINI INTERNATIONAL UNIVERSITY

Oct. 2019 - Jan. 2020

- Instructor: Dr. Farzad Ebrahimi

## Internship & Working Experience

### Iran Khodro (Iran Largest Automobile Manufacturer)

Tehran, Iran

MECHANICAL ENGINEER

Aug. 2019 - Sep. 2019

- Involved in repairing Kuka robots from Peugeot 206 production line and repairing Festo's pneumatic valve.
- Repairing automotive sealer system, "Hydrum gun" in destructive Tests, stud-welder gun and and those dealing with hydraulics and pneumatics in mechanical Engineering workbench.

### Iran Khodro (Iran Largest Automobile Manufacturer)

Tehran, Iran

MECHANICAL ENGINEER

Jun. 2018 - Oct. 2018

- Involved in repairing atlascopco's equipment like nutrunners or other pneumatic or electrical equipment from samand's or Dena's production line.

### Imam Khomeini International University Electronic Vehicle Student Team

Qazvin, Iran

MECHANICAL ENGINEER MEMBER

Jul. 2017 - Aug. 2020

- Member of aspaEV student team in mechanical engineering group for design and repair of electric cars And then were working on designing home-cleaning robots. ([Website](#))

## Notable Projects

Jan. 2022	<b>Mars Rover Simulation,</b>	Advanced Dynamics
Aug. 2022	<b>Elastostatic and Constraint-wrench Analysis of McGill Schönflies motion generator robot ,</b>	Dynamics of Multi-Body Systems
May. 2022	<b>Implementation of newly developed Bézier integration formula inside Cosimulation subsystems,</b>	Advanced Numerical Methods
Jul. 2022	<b>Economic Singular Value Decomposition to accurately retrieve the low-rank texture of an image that contains a deformed and damaged version ,</b>	Computational Data Mining
Jan. 2020	<b>Analysis and Simulation of the Ring Rolling Process ,</b>	Finite Element Method

## Journal Publication

### On the generalized Bézier-based integration approach for co-simulation applications

IF:3.109

MULTIBODY SYSTEM DYNAMICS

• Nopour, R.; Taghvaeipour, A.; Aghdam, M.M.; & González, F. - submitted

### Nonlinear forced vibrations of three-phase nanocomposite shells considering matrix rheological behavior and nano-fiber waviness

IF:7.963

ENGINEERING WITH COMPUTERS

Feb. 2022

• Nopour, R. ;Ebrahimi, F.; Dabbagh, A & Aghdam, M. M.; [Link](#)

### Effects of polymer's viscoelastic properties and curved shape of the CNTs on dynamic response of hybrid nanocomposite beams

IF:4.853

WAVES IN RANDOM AND COMPLEX MEDIA

Feb. 2022

• Ebrahimi, F.; Nopour, R. & Dabbagh, A; [Link](#)

### Smart laminates with an auxetic ply rested on visco-Pasternak medium: Active control of the system's oscillation

IF:7.963

ENGINEERING WITH COMPUTERS

Nov. 2021

• Ebrahimi, F.; Nopour, R. & Dabbagh, A; [Link](#)

### Effect of viscoelastic properties of polymer and wavy shape of the CNTs on the vibrational behaviors of CNT/glass fiber/polymer plates

IF:7.963

ENGINEERING WITH COMPUTERS

Apr. 2021

• Ebrahimi, F., Nopour, R. & Dabbagh, A; [Link](#)

## Top Certificates

2021	<b>Machine Learning</b> , Grade Achieved: 93.23%	Stanford University
2021	<b>Neural Networks and Deep Learning</b> , Grade Achieved: 88.48%	DeepLearning.AI
2021	<b>Academy peer reviewer</b> , Publons Academy Graduate	Publons
2018	<b>Catia II</b> , Mechanical Design	MFT Tehran

## Honors & Voluntary Activity

2022	<b>Academy Peer Reviewer</b> , Journal of Measurement and Control	-
2022	<b>Academy Peer Reviewer</b> , Advances in Materials and Processing Technologies Journal	-
2021	<b>Academy Peer Reviewer</b> , Journal of Sandwich Structures and Materials	-
2021	<b>Exempted from university entrance exam for M.Sc. program and offered M.Sc. program from Imam Khomeini International University, IKIU</b>	Qazvin
2016	<b>3rd Place</b> , Environment Startup Weekend	Qazvin

## Skills

MATLAB [●●●●○]  
ADAMS [●●○○○]  
Fast Learner

ABAQUS [●●●●○]  
CATIA [●●○○○]  
Adaptability

SolidWorks [●●○○○]  
Python [●●●●○]  
Ability to Work Under Pressure

## Selected Courses

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Advanced Dynamics	21/20 (Top Student)
Dynamics of Multi-Body Systems	18.9/20 (Top Student)
Finite Element Method	20/20 (Top Student)
Advanced Numerical Methods	19.3/20 (Top Student)
Computational Data Mining	18.7/20
Mechanical Engineering Design I	20/20 (Top Student)
System Identification	17.5/20
Automatic control	19/20 (Top Student)

## Language Proficiency

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**English**, C1-Advanced; Certificate of completion of the Upper-intermediate level at Safir language academy (The Second Largest English Language School in Iran) [Passing Mark: 96 from 100] , [Certificate No: 00/E0649973] , [Genuine Code: 0021396760], ([See credential](#))

**IELTS** , Jun. 2022; estimated Score: 7.

**Persian** , Bilingual proficiency.