# Farzad KashefiNishabouri

School of Mechanical Engineering, Iran University of Science and Technology, Tehran, Iran

### **Education**

Academic Qualifications.....

Iran University of Science and Technology BSc, Current GPA: 3.91/4 - 18.10 / 20, Ranked <u>3rd</u> Among 115 Students

Tehran, Iran

Sep. 2014-Present

My overall GPA is approximately 3 (out of 20) **points above** the average GPA of mechanical engineering students of School of Mechanical Engineering

Iran University of Science and Technology is one of the best universities of Iran based on international rankings such as US news, QS, and Times Higher Education.

#### ATTCE advanced branch

Tehran, Iran

High School Diploma,

Sep. 2010-Jun. 2014

GPA:19.54 / 20

#### Notable selected courses.....

- Mechanics of Material I (4/4) (1st mark of class)
- Mechanics of Material II (4/4) (2st mark of class)
- Mechanics of Material III (4/4) (1st mark of class)
- An Introduction to Mechatronics (4/4)
- Fluid Mechanics I & II (4/4) (1st mark of class)
- Fluid Mechanics Lab (4/4) (1st mark of class)
- Indroductory Finite Elements (4/4) (1st mark of class)
- Thermodynamics I (4/4) (1st mark of class)
- Thermodynamics II (4/4) (2nd mark of class)
- Thermodynamics Lab (4/4) (1st mark of class)
- Materials Science Lab (4/4) (1st mark of class)
- Practical Plasticity and Metal Forming (4/4)
- Fundamentals of Electrical Engineering I and II (4/4) (1st mark of class)
- Fundamentals of Electrical Engineering Lab (4/4) (1st mark of class)
- Dynamics of Machinery (4/4) (1st mark of class)
- Mechanical Vibrations (4/4)
- Design of Machinery I & II (4/4)
- Mechanics of Material Lab (4/4) (1st mark of class)
- Heat Transfer I (4/4)

- Automatic Control (4/4)
- General physics I & II (4/4) (Full Mark)

Publications.

- Shokrieh M.M, Kazemirad S., KashefiNishabouri F., "Effect of CNT and Graphene Particles on Viscoelastic Behavior of Composite Materials" (In Preparation), (Can be approved by the supervisor: shokrieh@iust.ac.ir & skaemirad@iust.ac.ir)
- KashefiNishabouri F., Shokrieh M.M, Kazemirad S., "CCFA-6 International Conference", "Frequency-dependent viscoelastic behavior of randomly-distributed-CNT/epoxy nanocomposites using a combined finite element-micromechanics method", (Submitted)
- HosseinKhanli A., Shojaei M., KashefiNishabouri F., Bayati A., "X-Mech 2018 International Conference", "Investigation and Presentation of a Non-destructive Test Method in Electrofusion joints of Polyethylene Gas Piping for City Gas Network", (http://xmech.iust.ac.ir/)

# **Experiences**

Teaching Experiences.

Design of Machinery Components II (TA)

Dr. Talebi Tooti Iran University of Science and Technology

Feb – May2018

Mechanics of Materials I (TA)

Tehran, Iran

Dr. Shokrieh Sep2017 – January 2018

Mechanics of Materials I (TA)

Tehran, Iran

Dr. Shokrieh Sep2016 – January 2017

Physics I (TA)

Dr. Zamani

Iran University of Science and Technology

*Dr. Zamani* Feb – May2016

Physics Teacher Tehran, Iran
Summer 2014-Summer 2017, Koosar High School

Work Experiences....

BMW sales and after sales service

Job internship, Workshop, problem diagnosis,

Summer 2017

BMW sales and after sales service

Job internship, Workshop, problem diagnosis,

Summer 2016

#### **Honors and Awards**

Admission to Sharif University Of Technology

Tehran, Iran

Tehran, Iran

Iran University of Science and Technology

Iran University of Science and Technology

Exempt from Msc. University Entrance Exam as an Exceptional Talented Student, September 2018

Top Student of BSc: Iran University of Science and Technology Tehran, Iran Rank 3rd among 115 Mechanical Engineering students, September 2018 Top Student of the Year: Iran University of Science and Technology Tehran, Iran Rank 3rd among 115 Mechanical Engineering students, september 2017 Top Student of the Year: Iran University of Science and Technology Tehran, Iran Rank **2nd** among 115 Mechanical Engineering students, September 2016 Top Student of the Year: Iran University of Science and Technology Tehran, Iran Rank 2nd among 115 Mechanical Engineering students, September 2015

Admission to Iran University of Science & Technology. tuition waiver.

Tehran, Iran 2014

Ranked 796 among more than 260000 participants in nationwide university Tehran, Iran entrance exam. Jul 2014

#### **National Physics Olympiad**

Tehran, Iran

Accepted for second stage (Being among top 600 students of whole Iranian highschool, Jun 2013 students (0.5 Million High School Students)

## **National Astronomy Olympiad**

Tehran, Iran

Accepted for second stage (Being among top 500 students of whole Iranian highschool, Jun 2013 students (0.5 Million High School Students)

# Fields of Interest

- o Health Related Fields (Devices, Monitoring, etc.)
- Biomechanics
- Sensors
- Machine Learning
- Environment
- Renewable Energy
- Sustainable Development
- Nano Technology

# **Projects**

o Nanocomposite's Viscoelastic behaviour

Developed a MATLAB code to make the CNT and imported it to ABAQUS to simulate the RVE of epoxy specimen reinforced by CNT and predict the viscoelastic behaviour by adjusted micromechanical theorem like Hashin and Tsai Wu and the results were checked by DMA experiment. This is a part of my BSc thesis seupervised by Prof. Shokrieh(professor of IUST) and Kazemirad(assistant professor in IUST).

#### Finite Element Analisys

Developed a program by C++ in order to read a truss structure from a text file and analyze the deformation, stress, and strain in every members of it. The code was validated by an ABAQUS simulation under the supervision of Dr. Bijan Mohammadi(associated professor in IUST).

#### Ball Throwing Mechanism

A structure was built to support the mechanism and a code was developed by Arduino to run the mechanism. The mechanism was calibrated to be able to get the input altitude (in a range) and throw a pingpong ball to reach that height. The project was done in a team of 3 students and under the supervision of **Dr.Borhan Beigzadeh** (assistant professor in IUST).

#### Simulating fluid flow around a rotating cylinder

A code was developed in MATLAb using stream functions and the characteristics of flow was shown by tecplot software and the result verified by Ansys simulation. The project was under supervision of **Dr.Siavashi(associated professor in IUST)** 

#### o Simlating an experiment of dropping a ball in tall fluid cylinder

The experiment was simulated in c++ to show the procedure graphically on a pc. The project was done under supervision of **Dr.Moghimi** (assistant professor in IUST).

Industrial

#### Polymer Concrete Slabs

Designing and Building molds of Polymer concrete for water distillation slabs

#### Drip Irrigation System

Designing a drip irrigation system for a 3000-square-meter (about 3588-square-yard) garden encompassing about 300 fruit trees of several different kinds. Choosing proper water pumps to deliver water to two tanks from a water well and to tress and sizing of pipes and etc. were involved in this project.

#### Skills

#### Computer.....

- Programming in C++
- Programming in MATLAB
- Abaqus
- Arduino
- Matlab Optimization
- Matlab GUI
- o Catia
- Tecplot
- Keyshot
- Microsoft Office (Word, Excel, PowerPoint etc.)

Language.

Persian: Native

English: Fluent- IELTS Band Score: 7.5

Listening 7.5 - Reading 8.0 - writing 6.5 - speaking 7.5

Future Skills Planned.....

o GRE exam will be taken on October

# Congress/workshop participation and presentation

**CCFA-6** The 6th International Conference on Composites:

Tehran, Iran

**Characterization, Fabrication & Application**, IUST

Fall 2018

Executive committee member http://ccfa.iust.ac.ir/

X-Mech 2018 Tehran, Iran

The Biennial International Conference on Experimental Solid Mechanics, IUST Spring 2018

Executive committee member

http://xmech.iust.ac.ir/

Presenter Tehran, Iran

- The Biennial International Conference on Experimental Solid Mechanics, X-Mech 2018

  http://xmech.iust.ac.ir/
- Voluntary participation in 1st International Conference on Clean Energy and Cogeneration Systems (ICECOGEN 2017)
- Voluntary participation in 5th National Conference on Renewable energy and Distributed Generation (ICREDG2017)

#### **Hobbies**

Photography

https://fkashefin.wixsite.com/photog

- Reading: mostly Psychology Related Books
   As both my parents are psychologists I somehow was in the atmosphere since I was a child.
- Playing soccer

#### References

o Dr. M.M Shokrieh, Professor at Iran University of Science and Technology

Email: shokrieh@iust.ac.ir

**Webpage:** http://www.iust.ac.ir/page.php?slct\_pg\_id=1464&sid=16&slc\_lang=en **Google Scholar:** https://scholar.google.com/citations?user=DZ84sC4AAAAJ&hl=en

o Dr. S.Kazemirad, Assistant professor at Iran University of Science and Technology

Email: skazemirad@iust.ac.ir

**Webpage:** http://idea.iust.ac.ir/page.php?slct\_pg\_id=18176&sid=16&slc\_lang=en **Google Scholar:** https://scholar.google.com.ua/citations?user=HmIE8AQAAAAJ&hl=en

o Dr. Roohollah Talebitooti, Associate Professor at Iran University of Science and Technology

Email: rtalebi@iust.ac.ir

**Webpage:** http://www.iust.ac.ir/page.php?slct\_pg\_id=13544&sid=16&slc\_lang=en