

NIMA KARIMI

Mechanical Engineer

@ nima97karimi@gmail.com

+98 9375740341

Tehran, Iran

www.linkedin.com/in/nimakarimi97

live:nimakarimi676

EDUCATION

Bachelor of Science in Mechanical Engineering

K. N. Toosi University of Technology (KNTU)

2015 – 2020

Tehran, Iran

- GPA: 3.2 / 4
- Last Two Years GPA (60 units): 3.4 / 4

PUBLICATION

- M.R. Mirzaei, N. Karimi, E. Najafi, “**ROS-based Motion Planner for Gazebo-Simulated Rescue Robots in RoboCup**” – 21st International Conference on Research and Education in Mechatronics (REM), Cracow, Poland
- M.R. Mirzaei, N. Karimi, E. Najafi, “A ROS-based Motion Planning Algorithm for Semi-Autonomous Rescue Robots in RoboCup” – International Journal of Robotics and Automation– Under review

EXPERIENCE

Admission Advisor

June 2019 – Present

Advising prospective students hoping to study abroad and applying for their desired universities.

- Freelancing
- Working at Ariana Pars Institution
- Working at Entekhab Afarinan Atieh Institution

Research Assistant

AI Laboratory

Fall 2019 – Present

Working on the intelligent robotic systems in the research group and implementing motion planning algorithms on mobile robots under the supervision of Dr. Najafi.

The outcome is two publications so far.

Research Assistant

Mechatronics Laboratory

Fall 2018 – Fall 2019

Worked as a research assistant

Thesis: Designing And Constructing A Setup For Simultaneous Torque And Velocity Tracking Control Of A Rotating Shaft Discrete Finite-Time Sliding Mode Algorithm

Internship

Kerman Momtazan Cement Company

Summer 2018

RESEARCH INTERESTS

- Mechatronics
- Control
- Machine Learning
- Robotics
- Neural Network
- Dynamics

SKILLS

Python

C/C++

MATLAB

Arduino

Simulink

SolidWorks

COMSOL

LabView

Ansys

Proteus

Prezi

ROS

L^AT_EX

CERTIFICATIONS

Certificate of Participation

21st International Conference on Research and Education in Mechatronics (REM 2020)

December 2020

Kraków, Poland

Deep Learning Specialization

Coursera – DeepLearning.AI

December 2020

Machine Learning

Stanford University

September 2020

Networked Robots

K. N. Toosi University of Technology

June 2018

Arduino

K. N. Toosi University of Technology

May 2017

Microsoft Office Package (ICDL)

May 2011

LANGUAGES

English: Full professional proficiency

TOEFL iBT: Overall: 95 R: 21, L: 28, S:22 W:24

GRE (General Test): 304 (Q: 166, V: 138)

Persian: Native

French: Elementary proficiency

RESEARCH & PRACTICAL PROJECTS

Modern Control

Design the state vector feedback controller (SVFC) and observer feedback in Simulink. Supervisor: Dr. M. R. HomaeiNezhad

📅 Spring 2019

Measurement & Control Systems

1- Design and implementation of a fingerprint sensor as a detection key to open a door with a 3D printer and Arduino. 2- Creating a grade chart for a class with LabView. Supervisor: Dr. E. Najafi

📅 Spring 2019

MEMS

Simulation of a bio-microneedle to break the kidney stones.

Supervisor: Dr. N. Naserifar

📅 Fall 2019

Introduction to Robotic and Lab

1- Programming a face detection lock. 2- Designed a Self-Stabilizing Spoon for dementia patients for controlling their hand vibration during mealtime. Supervisor: Dr. A. Najafi Ardekany

📅 Fall 2019

FEM

1- Calculating stresses and strains of truss by numerical analysis in MATLAB. 2- Programming mesh generator in MATLAB. 3- Simulation of an example of Mechanics of Materials in Ansys Workbench.

Supervisor: Dr. M. Asgari

📅 Spring 2018

Automatic Control

Designing and simulation PID controller for a tracker. Prof. A. Ghaffari

📅 Spring 2018

Heat Transfer

Simulation and optimization of a room heat system in Comsol.

Supervisor: Dr. A. Mojra

📅 Fall 2018

Computer Programming

Programing a scientific calculator for matrix in python. Supervisor: Dr. A. Nahvi

📅 Fall 2018

HONORS & AWARDS

- Received tuition waiver for Bachelor's studies

📅 Fall 2015

- Rank 1% among over 180,000 participants in the Iranian university entrance exam (Konkour)

📅 Summer 2015

- Recognized exceptional talent by NODET

📅 Fall 2011

TEACHING EXPERIENCE

Mechanical Vibration – Teacher Assistant

Lecturer: Dr. M. R. HomaeiNezhad

📅 Spring 2018

MEMBERSHIP

- Iranian Society of Mechanical Engineers member (ISME)
- Red Crescent member

REFERENCES

Esmail Najafi, Assistant Professor

Mechatronics Department Faculty at of Foynts University Applied Science

📍 Eindhoven, Netherlands

@ e.najafi@fontys.nl

tell: +3161841949

Ali Najafi Ardekany, Assistant Professor

Head of Mechatronics Engineering at K. N. Toosi University of Technology

📍 Tehran, Iran

@ Najafi@kntu.ac.ir

Seyed Hossein Sadati, Assistant Professor

Mechanical Engineering Faculty at K. N. Toosi University of Technology

📍 Tehran, Iran

@ sadati@kntu.ac.ir