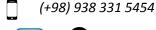
# **Curriculum Vitae**

# Hamid Manouchehri











#### **Education:**

Master of Science in Mechatronics Engineering

**University of Tehran** 

Thesis title: A Model-Based Control System for Bi-Manual Object Manipulation (link)

GPA: -

Related Passed Courses: Advanced Math, Mechatronics, Dynamics, Advanced Robotics, Nonlinear &

Fuzzy Control, Machine Vision (audited), Bio-inspired Computing

Bachelor of Science in Electrical Engineering (Control Engineering)

**University of Kashan** 

**Project title:** Design and Manufacturing of Pneumatics Table of Instrumentation Lab (link)

GPA: -

**Related Passed Courses:** Calculus, Computer Programming (C), Circuit Theory, Electronics & Microprocessor, Digital Signal Processing, Communication Systems, Linear, Advanced & Digital Control, Linear Algebra, Industrial Control, Instrumentation, Industrial Automation

Kashan, Iran 2015 - 2019

Apr 2021

Jan 2021

Feb 2021

Mar 2020

Feb 2020

Tehran, Iran 2019 - Feb 2023

**Research Interests:** 

Legged Locomotion

- Machine Vision
- Robotic Manipulators

- Autonomous Mobile Manipulators
- Underactuated Robotics
- Al, particularly for robotics applications

**Teaching Experience:** 

> Teacher Assistant Spring 2017

Instructor: Dr. Farzan Rezaei

Course: Digital Logic and Computer Design

**Responsibilities:** Teaching applications of 'Proteus Design Suite' in digital circuit analysis

and design, and mentoring the students.

**Project and Research Experiences:** 

> Implementation of Ant Colony Optimization (ACO) in Vehicle Routing Problem and

Genetic Algorithm in a Decision-Making Problem. (link)

Instructor: Dr. Masoud AsadPour

**Course:** Bio-inspired Computing

Implementation of a PID Controller by Fuzzy Logic (Self-organizing Fuzzy PID Controller)

Instructor: Prof. Aghil Yousefi Koma

Course: Fuzzy Systems: Theory and Control

> Simulation of a Wheeled Inverted Pendulum by Partial Feedback Linearization (link)

Instructor: Dr. Khalil Alipour

Course: Nonlinear Control Systems Design

> Design and Manufacturing of a **3-DOF Robotic Manipulator (MeArm)** (link)

Instructor: Dr. Mohammad Dehghani

Course: Advanced Robotics

Design and Simulation of a Pipe-inspection Robot in SolidWorks (link)

Instructor: Dr. Alireza Hadi Hosseinabadi

Course: Mechatronics 2

## > Fanavard Competition of Sharif University of Technology

→ As a team, we were planning to run an E-Commerce **startup** to provide online repairing services.

## **Skills:**

- Robotic Softwares / Middlewares: Robot Operating System (ROS 1), RBDL toolkit, RViz, MOVEit, OpenCV (familiar), RoboDK (familiar)
- Programming Languages: C (Professional), Python, C++, C#, bash script, XML, Lua
- Technical Softwares: MATLAB (Script, Simulink, GUI), Proteus, Altium Designer, Docker
- Mechanical Softwares: SolidWorks, FreeCad (familiar), MCS Adams
- **Embedded Systems:** MPLAB X IDE (PIC MCUs), Keil (ARM MCUs), CodeVision (AVR MCUs), Raspberry Pi Pico MCU, Arduino IDE, Raspberry Pi (Raspbian OS), NodeMCU, SIM800L GSM
- Version Control Tools: Git, GitHub, GitLab
   Linux: LPIC-1 (Linux Professional Institute)

# **Working Experience:**

➤ Electronics Engineer, Part-time (<u>link</u>)

Employer: Parmis Smart Home

Business: Design of smart devices for BMS (Building Management System)

Responsibilities: Embedded system designer, Firmware developer of PIC MCUs

> Electronics Engineer, CAD Designer, Part-time (link)

Employer: Kanda Idea Company

Responsibilities: Research and Development, Designing a box for some electrical devices

Tehran, Iran
Feb – Nov 2020

with SolidWorks

Windows Software Developer, C# programmer, Internship
 Employer: Behyar Sanaat Sepahan Co.
 Isfahan, Iran
 Jun – Aug 2017

Responsibilities: Development of windows softwares in VisualStudio (WPF), C# programming

#### **Certificate:**

Robot Operating System **(ROS)**: Basic, offered by <u>PISHROBOT</u>, approved by **ROBOTIS Covered topics:** Basic concepts of ROS 1 (melodic), navigation of TurtleBot in RViz as final project.

Sep 2021

## **Language Proficiency:**

Exam	Overall Score	Scores	
TOEFL iBT (Mar 12, 2023)	-	-	
GRE General (Apr 17, 2023)	-	-	

#### **References:**

Dr. Mohammad Shahbazi	M.Sc. Supervisor	Assistant Professor   School of Mechanical Engineering Iran University of Science and Technology Email: <a href="mailto:shahbazi@iust.ac.ir">shahbazi@iust.ac.ir</a> , <a href="mailto:HomePage">HomePage</a> , <a href="mailto:Google Scholar">Google Scholar</a>
Dr. Bahrām Tarvirdizadeh	M.Sc. Supervisor	Associate Professor   Faculty of New Science and Technology University of Tehran Email: <a href="mailto:bahram@ut.ac.ir">bahram@ut.ac.ir</a> , <a href="mailto:HomePage">HomePage</a> , <a href="mailto:Google Scholar">Google Scholar</a>
Dr. Alireza Hadi Hosseinabadi	M.Sc. Advisor	Associate Professor   Faculty of New Science and Technology University of Tehran Email: <a href="mailto:hrhadi@ut.ac.ir">hrhadi@ut.ac.ir</a> , <a href="mailto:HomePage">HomePage</a> , <a href="mailto:Google Scholar">Google Scholar</a>