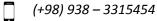
## **Curriculum Vitae**

# Hamid Manouchehri











#### **Education:**

Master of Science in Mechatronics Engineering University of Tehran

2019 - Dec 2022

Thesis title: A Model-based Control System for Bi-manual Manipulation (In progress)

**GPA: 3.07 / 4** (15.91 / 20.00)

Bachelor of Science in Electrical Engineering (Control Engineering)

Kashan, Iran 2015 - 2019

Tehran, Iran

University of Kashan **Project title:** Design and Manufacturing of Pneumatics Table of Control Laboratory (link)

**GPA: 3.09 / 4** (15.74 / 20.00) - last two years

## **Research Interests:**

Legged locomotion

- Machine Vision
- Robotic Manipulators

- Autonomous Mobile Robots
- Underactuated Robotics
- AI, 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
Apr 2021

Genetic Algorithm in a Decision Making Problem. (<u>link</u>) Instructor: Dr. Masoud AsadPour

Course: Bio-inspired Computing

> Implementation of a PID Controller by Fuzzy Logic (Self-organizing Fuzzy PID Controller) Jan 2021

Instructor: Prof. Aghil Yousefi Koma

Course: Fuzzy Systems: Theory and Control

Simulation of a Wheeled Inverted Pendulum by Partial Feedback Linearization (link)
Feb 2021

**Instructor:** Dr. Khalil Alipour

Course: Nonlinear Control Systems Design

Design and Manufacturing of a 3-DOF Robotic Manipulator (MeArm) (link) Mar 2020

Instructor: Dr. Mohammad Dehghani

**Course:** Advanced Robotics

Design and Simulation of a Pipe-inspection Robot in SolidWorks (link)
Feb 2020

Instructor: Dr. Alireza Hadi Hosseinabadi

Course: Mechatronics 2

> Fanavard Competition of Sharif University of Technology

Summer 2017

→ 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 (familiar), 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 (<u>link</u>)

**Employer:** Kanda Idea Company **Responsibilities:** Research and Development, Designing a box for some electrical devices

with SolidWorks

Windows Software Developer, C# programmer, Internship

Employer: Behyar Sanaat Sepahan Co.

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

project.

**Language Proficiency:** 

Level	Overall Score	Scores	Exam	Date
Advanced	-	-	IELTS (Academic)	November 2022

#### **References:**

Hosseinabadi

Dr. Mohammad Shahbazi M.Sc. Supervisor Assistant Professor | School of Mechanical Engineering

Iran University of Science and Technology

Email: shahbazi@iust.ac.ir, HomePage, Google Scholar

Isfahan, Iran

Mar - Dec 2021

Tehran, Iran

Feb - Nov 2020

Isfahan, Iran Jun – Aug 2017

Sep 2021

Dr. Bahram Tarvirdizadeh M.Sc. Supervisor Associate Professor | Faculty of New Science and Technology

University of Tehran

Email: <u>bahram@ut.ac.ir</u>, <u>HomePage</u>, <u>Google Scholar</u>

Dr. Alireza Hadi M.Sc. Advisor Associate Professor | Faculty of New Science and Technology

University of Tehran

Email: hrhadi@ut.ac.ir, HomePage, Google Scholar