


# Curriculum Vitae

## Hamid Manouchehri

 [hamid.manouchehri.nif@gmail.com](mailto:hamid.manouchehri.nif@gmail.com)

 (+98) 938 – 3315454



---

### Education:

- **Master of Science in Mechatronics Engineering** Tehran, Iran  
2019 - Dec 2022  
University of Tehran  
**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  
University of Kashan  
**Project title:** Design and Manufacturing of Pneumatics Table of Control Laboratory  
**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 **Genetic Algorithm** in a **Decision Making Problem**. Apr 2021  
**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** Feb 2021  
**Instructor:** [Dr. Khalil Alipour](#)  
**Course:** Nonlinear Control Systems Design
- Design and Manufacturing of a **3-DOF Robotic Manipulator (MeArm)** Mar 2020  
**Instructor:** [Dr. Mohammad Dehghani](#)  
**Course:** Advanced Robotics
- Design and Simulation of a **Pipe-inspection Robot** in SolidWorks 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**  
**Employer:** Parmis Smart Home  
**Business:** Design of smart devices for BMS (Building Management System)  
**Responsibilities:** Embedded system designer, Firmware developer of PIC MCUs  
**Isfahan, Iran**  
**Mar – Dec 2021**
- **Electronics Engineer, CAD Designer, Part-time**  
**Employer:** Kanda Idea Company  
**Responsibilities:** Research and Development, Designing a box for some electrical devices with SolidWorks  
**Tehran, Iran**  
**Feb – Nov 2020**
- **Windows Software Developer, C# programmer, Internship**  
**Employer:** Behyar Sanaat Sepahan Co.  
**Responsibilities:** Development of windows softwares in VisualStudio (WPF), C# programming  
**Isfahan, Iran**  
**Jun – Aug 2017**

---

### Certificate:

Robot Operating System (**ROS**): Basic, offered by [PISHROBOT](#), approved by **ROBOTIS**  
**Covered topics:** Basic concepts of ROS 1 (melodic), navigation of TurtleBot in Rviz as final project.  
**Sep 2021**

---

### Language Proficiency:

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

---

### 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="#">HomePage</a> , <a href="#">Google Scholar</a>
Dr. Bahram 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="#">HomePage</a> , <a href="#">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="#">HomePage</a> , <a href="#">Google Scholar</a>