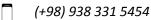
Curriculum Vitae

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: 3.22 / 4 (15.91 / 20.00)

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

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

Tehran, Iran 2019 - Feb 2023

Kashan, Iran 2015 - 2019

Apr 2021

Jan 2021

Feb 2021

Mar 2020

Feb 2020

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

1

> 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 (<u>link</u>)

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.
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: shahbazi@iust.ac.ir , HomePage , Google Scholar
Dr. Bahrām Tarvirdizadeh	M.Sc. Supervisor	Associate Professor Faculty of New Science and Technology University of Tehran Email: bahram@ut.ac.ir , HomePage , Google Scholar
Dr. Alireza Hadi Hosseinabadi	M.Sc. Advisor	Associate Professor Faculty of New Science and Technology University of Tehran

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