Ali Karimzadeh Esfahani
Robotics Engineer

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SUMMARY OF QUALIFICATIONS

- First year MEng in mechanical engineering student at the university of Ottawa.
- Excellent individual and teamwork skills honed through years of experience in university projects.
- Research and analysis skills developed by working on my Bachelor of Science theses.

EDUCATION

- **Master of Engineering, Mechanical Engineering(Robotics)**

  University of Ottawa, ON   SEP 2022 - Until now
  - **Relevent Courses:** Biomechanics of Movements, Digital Signal Processing, Applied Artificial Intelligence

- **Bachelor of Science, Mechanical Engineering(Robotics)**

  University of Isfahan, Isfahan, Iran   SEP 2016 - OCT 2020
  - **Bachelor's Theses:** Using Deep Reinforcement Learning algorithms to push an object with robotic Manipulators
  Supervisor: Dr. Hossein karimpour   **Grade:20/20**
  - **Overall GPA:** 3.46
  - **Relevent Courses:** Computer Programming, Dynamics, Dynamics of Mechanics, Mechanical Vibration, Automatic Control, Robotics, Artificial Intelligence and Expert Systems, Simulation of Dynamic Systems and Control
  - **Relevent Courses from MSc Programs(voluntary Participation):** Digital Image Processing, Robotics

SKILLS

- **Engineerins Skills**
  - **Robotics & Reinforcement Learning:** Robot Operating System(ROS),Gazebo, MoveIt, MuJoCo, OpenSim, LabVIEW
  - **Machine Learning:** TensorFlow, PyTorch, scikit-learn
  - **Computer Vision:** OpenCV, Matlab Image Processing Toolbox
  - **Digital Signal Processing:** MATLAB DSP toolbox, FIR and IIR filters, FMCW Radars
  - **Linear control system design:** Lead, Lag, and PID Controllers
  - **Embedded Systems:** Raspberry Pi, NVIDIA Jetson TX1, Arduino
  - **Web, and Android development:** HTML, CSS, Tailwind CSS, React, Django, SQL, Android Studio
  - **Operating Systems:** Ubuntu, Windows, Debian

- **Languages**
  - **Programming:** Python, JavaScript, C++, Java
  - **Markup:** LaTeX, HTML, CSS, XML, SQL

- **Soft Skills**
  - **Quick Learner:** I am always eager to learn new things, especially in my research area of interest.
  - **Passionate to work in teams:** With many projects that I have done in teams, I have experience with teamwork, and I am also good at working with Git and GitHub to ease teamworking.

RESEARCH INTERESTS

- Robotics
- Computer vision
- Digital Signal Processing
- Autonomous vehicles
- Machine Learning
- Controller design and Simulation
- Biomechanics
- Embedded systems programming

RELEVANT WORK EXPERIENCE

ACADEMIC PROJECTS

HONORS & AWARDS

WORKSHOPSWORKSHOPS & SEMINARS

REFEREES