

As a robotics developer, you will be responsible for completing the development and optimization of the elements related to the operation and control of various robotics platforms. You will actively participate in modeling, simulation and algorithm integration activities, provide the necessary support and training to the integration team, ensure the evolution of control to increase security and intuitiveness according to application fields.

Project type:

- Movo (<u>https://www.kinovarobotics.com/en/products/mobile-manipulators</u>)
- ROS package for our Jaco robots (https://github.com/Kinovarobotics/kinova-ros)
- Movelt plugin development
- Grasplt plugin development
- Gazebo simulation development
- Future ROS2 package design for all our robotic platforms.

Duties:

- Design and develop ROS solutions for all our products.
- Contribute to kinematic developments for a robot with 6 degrees of freedom and more, kinematic calibration, etc.
- Participate in the optimization of the movement of a redundant robot
- Singularity and workspace management
- Articular, Cartesian, admittance/impedance control
- Provide technical assistance and guidance to the team, in addition to sharing your technological knowledge
- Cooperate with the different teams in order to validate and diagnose problems (troubleshooting)

Requirements:

- Degree in electrical engineering, computer science, robotics, or any other related field 3-5 years' experience in ROS (Robot Operating System)
- 3-5 years' experience in C and C++ programming
- 3-5 years' experience in product development
- Experience in robotic arm control
- Experience with Matlab/Simulink

Assets:

- Experience in control systems
- Experience in controlling redundant robotic arms
- Experience in admittance/impedance control
- Experience with vision and/or haptic systems
- Experience in an Agile work environment and/or as a Scrum Master