

5.1 Job Posting for Researcher at **Robotnik**.

Robotnik Automation S.L.: Ronda Auguste y Louis Lumière, 8, 46980 Parque Tecnológico, Paterna, Valencia, Spain

Eligible sending organisations

AUTH, JSI, ULUS

Role title

Cybersecurity software engineer - Robotics

Environment

The secondee will be involved in **R&D activities** within our **Software Development Department**, contributing to the **development, integration and validation of software for autonomous mobile robots and mobile manipulators**. Depending on the candidate's background and ongoing projects, the work may cover areas such as **navigation**, **perception**, **control**, **manipulation**, **simulation** or **software testing**, providing a broad industrial robotics experience suitable for an R1/R2 profile.

What you will work on

The secondee will:

- Develop or extend software modules for autonomous mobile robots and mobile manipulators, including areas such as navigation, perception, control, manipulation or system tools.
- Integrate and configure software components, sensors and third-party libraries within ROS/ROS 2-based robotic platforms.
- Create simulation and real-robot test scenarios to validate functionality, performance and robustness.
- Analyse system behaviour and logs, troubleshoot issues, and contribute improvements to software quality, maintainability and automated validation.

- Participate in team meetings and stand-ups and undertake independent tasks with clear objectives, supported by members of the RBTK team.

What you will gain

- The secondee will gain hands-on experience developing and validating software on commercial mobile robotic platforms in an industrial R&D environment. They will strengthen their skills in ROS/ROS 2, system integration, simulation and real-robot validation, while learning how research-oriented software is matured into reliable product functionality.
- The secondee will also benefit from job shadowing, cross-functional collaboration and networking opportunities, and, where relevant, participation in training or knowledge-sharing activities such as internal demos or presentations.

Desired profile

- **Programming experience in Python and/or C++.** These are the main languages used for robotics software development and integration at Robotnik.
- **Experience with Linux and version control systems such as Git.** They are part of the standard development workflow for collaborative robotics projects.
- **Background in robotics, autonomous systems or a related software field; familiarity with ROS/ROS 2 is desirable.** The role involves working with integrated robotic platforms, while allowing candidates with adjacent expertise to adapt quickly.
- **Experience in at least one relevant area such as navigation, perception, control, simulation, manipulation or software testing is valued.** The activities can be tailored to the secondee's strengths and to ongoing Robotnik R&D and product-development needs.

Duration & Flexibility

3 months (continuous stay) between May and November 2027