

2.1 Job Posting for Researcher at **PACT**.

Parque do Alentejo de Ciência e Tecnologia:
Herdade da Barba Rala, R. Luís Adelino Fonseca 1A, 7005-345 Évora, Portugal

Eligible sending organisations

AUTH, JSI

Role title

Robotics & Human-Robot Interaction Engineer

Environment

Join PACT **to connect with companies in industry 4.0** fields, **gain insights applicable to your research**, and **collaborate** within a dynamic research ecosystem **to develop and deliver solutions with real-world impact.**

PACT's **Future Lab** is investing in humanoid robots, with capacity already available for data collection, robot learning, and experimentation.

We excel in bridging industry and academia, practical challenges, and opportunities for collaboration and **technology transfer.**

Watch a short video of PACT's headquarters and working environment here.

What you will work on

- Program, calibrate, and deploy advanced mobility and autonomous navigation (SLAM) algorithms for the Unitree Go2 quadruped and a humanoid G1 Pro.
- Integrate and operate a Unitree Z1 Pro robotic arm equipped with a camera Intel RealSense D435i and multi-material end-effectors for complex manipulation tasks.
- Design and test interaction and computer vision algorithms for **robotic perception and autonomy**, such as for automated warehouse navigation and inspection tasks or agrifood crop monitoring and field inspection, ensuring safe and intuitive human-robot collaboration in shared environments.
- Hands-on **robotics training actions** for students in the Alentejo, collaborating with schools and training partners.

What you will gain

The secondee will gain:

- Hands-on development experience with state-of-the-art **quadruped (Unitree Go2) and bipedal (G1 Pro) robots.**
- Direct interaction with real-world **automation challenges**, bridging academic research and industrial applications.
- Opportunities to **publish** breakthrough results, **lead** technical work, and **strengthen competencies** in autonomous systems and robotic control.

Desired profile

- **First Stage** or **Recognised Researcher** in Mechanical Engineering, Electrical Engineering, Computer Science, Autonomous Systems, or similar field.
- Strong background in **robotic kinematics and dynamics**, motion planning, ROS/ROS2, and computer vision.
- Experience programming **physical robotic manipulators**, mobile platforms, and working with LiDAR or **depth-sensing sensor suites** for **SLAM / autonomous navigation**.

Duration & Flexibility

3 to 5 months (continuous stay) between May and November 2027

Can be split into separate stays **of at least 6 weeks each** (for example 2 x 6-8 weeks) upon agreement.
The month of August is not recommended, as PACT's offices observe annual leave at that time.