

## **Advanced Robotic Control and Intelligence**

THEKER is a cutting-edge robotics and AI startup revolutionizing the industrial automation space. We operate in a **super fast-paced environment**, constantly tackling complex challenges and pushing the boundaries of robotics innovation. Our mission is to build intelligent, efficient, and adaptable robotic systems that make a real impact in the world.

## **About the Project**

This project develops advanced robotic control with in-context learning, enabling adaptive real-time decision-making. The focus is on integrating cutting-edge sensor technology with Al-driven motion planning and dynamic path optimization. The methodology includes reinforcement learning approaches to fine-tune robot actions in unpredictable environments, probabilistic models for uncertainty estimation, and multimodal sensor fusion combining vision, force feedback, and tactile sensing. By leveraging transformer-based models for sequence prediction and motor control refinement, the system aims to boost robotic agility, precision, and responsiveness. The project may also incorporate human-in-the-loop strategies to refine control policies and improve interaction between robots and operators in collaborative settings. This research has potential applications in industrial automation, medical robotics, and high-precision assembly tasks.

## What We Offer

- The chance to be part of an exciting, fast-growing robotics and AI startup.
- A super fast-paced environment where your contributions will have a real impact from day one.
- A collaborative, supportive team made up of passionate innovators.
- The opportunity to work on cutting-edge robotics projects and solve real-world challenges.
- Professional growth opportunities and the chance to shape your career in a cutting-edge industry.
- A positive, inclusive, and dynamic company culture where new ideas are encouraged and valued.
- 100% on-site work in Barcelona

## **Final Observation**

At **THEKER**, we are committed to **equality**, **diversity**, **and inclusion** in hiring. We believe that everyone should have the opportunity to contribute to building a better future, and we strive to create a workplace where **everyone feels welcome**, **respected**, **and valued**.

Join us in shaping the future of robotics at THEKER! 🚀

Ready to take on the challenge? Apply now!

#BuildingTheRobotsOfTheFuture