Advanced Barcode Identification (Label Identification)

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 explores barcode identification for robotic applications in industrial environments. Leveraging computer vision and deep learning, the system ensures real-time, high-accuracy label detection, even in dynamic and unstructured settings. The methodology includes optimizing preprocessing steps such as binarization, denoising, and contrast enhancement, using convolutional neural networks (CNNs) for feature extraction, and applying sequence models like CRNN or transformers for robust decoding. Additionally, the system integrates rotational invariance techniques to improve barcode detection at various angles and partially occluded scenarios. High-speed cameras and optimized recognition algorithms will enable seamless object tracking and automation, ensuring reliable industrial operations. The project could be extended with practical applications in automated warehouses or manufacturing lines.

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