**Identify and Place desired object using an Artificially Intelligent Robotic Arm**

**Abstract:**

Robotics nowadays is becoming more popular due to diverse applications.We propose to implement Inverse Kinematics of a Robotic Arm and enhancing its working using Artificial Intelligence, by means of object tracking. It will help to achieve the goal of picking and placing the desired object. Integrating System On-Chip (SOC) technology will allow complex hardware functionality on a single chip. ?

Our aim is to design and develop an algorithm and implement it on a robotic arm having an embedded processor and process the detected image to track the object in real time. **(break the sentence)**The information about the object and environment(?location) will be stored in the database**?**, by applying the concept of Artificial Intelligence the various possibilities?(list out) will be calculated out of which the best solution will be decided and action will be taken henceforth.

Robotic arms are largely required in factories and labs. using this concept, man power can be reduced by a great extent and causalities can be avoided in applications where the jobs are dangerous. Accuracy is achieved.

**Abstract:**

Robotics nowadays is becoming more popular due to diverse applications.The system implements Inverse Kinematics of a Robotic Arm and enhances its working using Artificial Intelligence, by means of object tracking. It will help to achieve the goal of picking and placing the desired object. The System On-Chip (SOC) technology is used for the system. Integrating System On-Chip (SOC) technology will allow complex hardware functionality on a single chip.

The aim is to design an algorithm and implement it on a robotic arm having an embedded processor. The detected image is then processed to track the object in real time. The information about the object and environment will be stored in the database, by applying the concept of Artificial Intelligence the various possibilities on the robotic arm movement will be calculated. The best solution from the set will be then decided and action will be taken as required.

Robotic arms are largely required in factories and labs. Using this concept, man power can be reduced by a great extent and causalities can be avoided in the applications where the jobs are dangerous. Accuracy can be achieved by the implementation of this system.