



SNS COLLEGE OF TECHNOLOGY

Coimbatore-35

An Autonomous Institution

Accredited by NBA – AICTE and Accredited by NAAC – UGC with
'A++' Grade

Approved by AICTE, New Delhi & Affiliated to Anna University,
Chennai



DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

19ECT213- IoT SYSTEM ARCHITECTURE

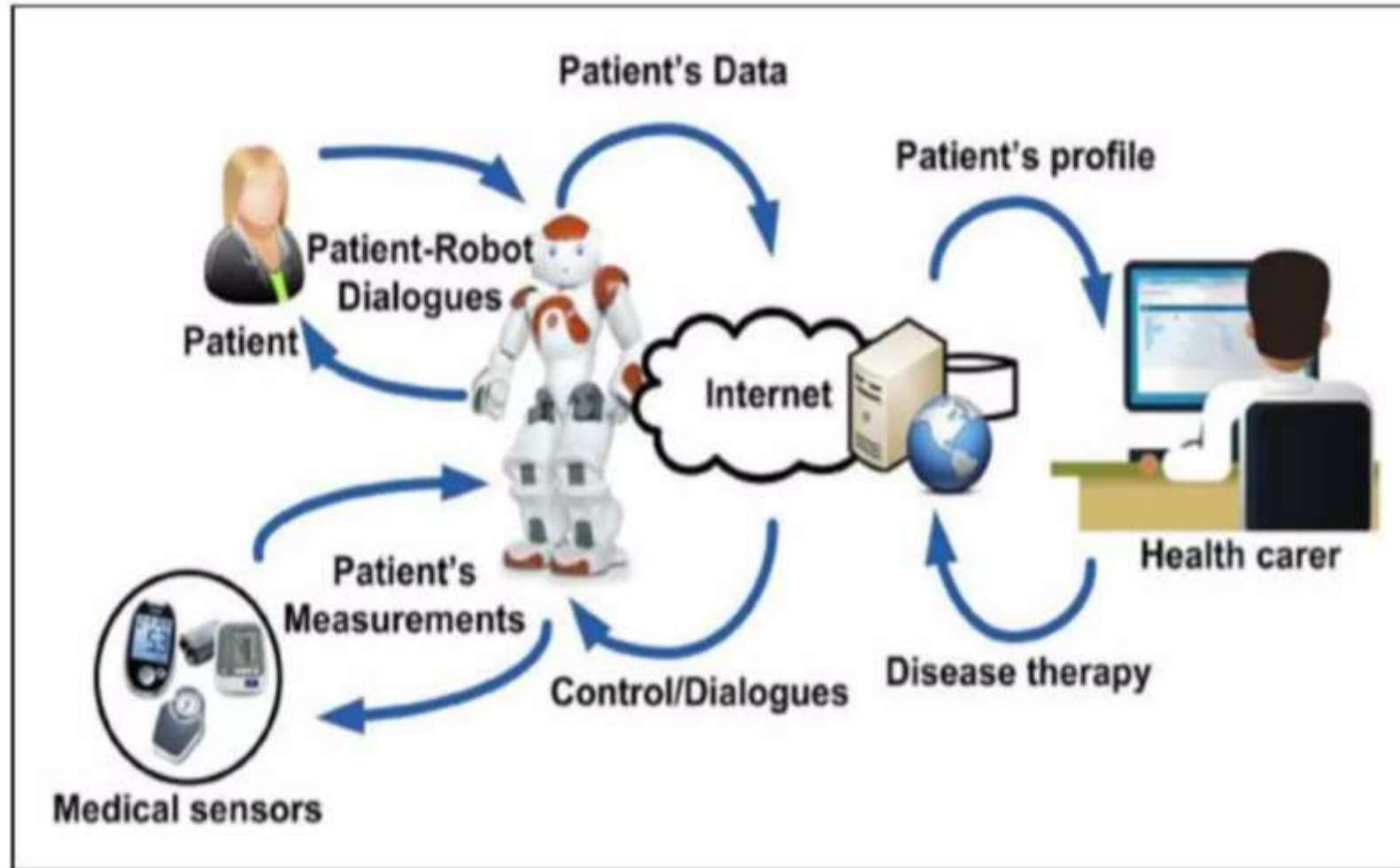
II ECE / IV SEMESTER

UNIT 5 – IOT APPLICATIONS

TOPIC –Applications of IoT in robotics



IoRT Applications



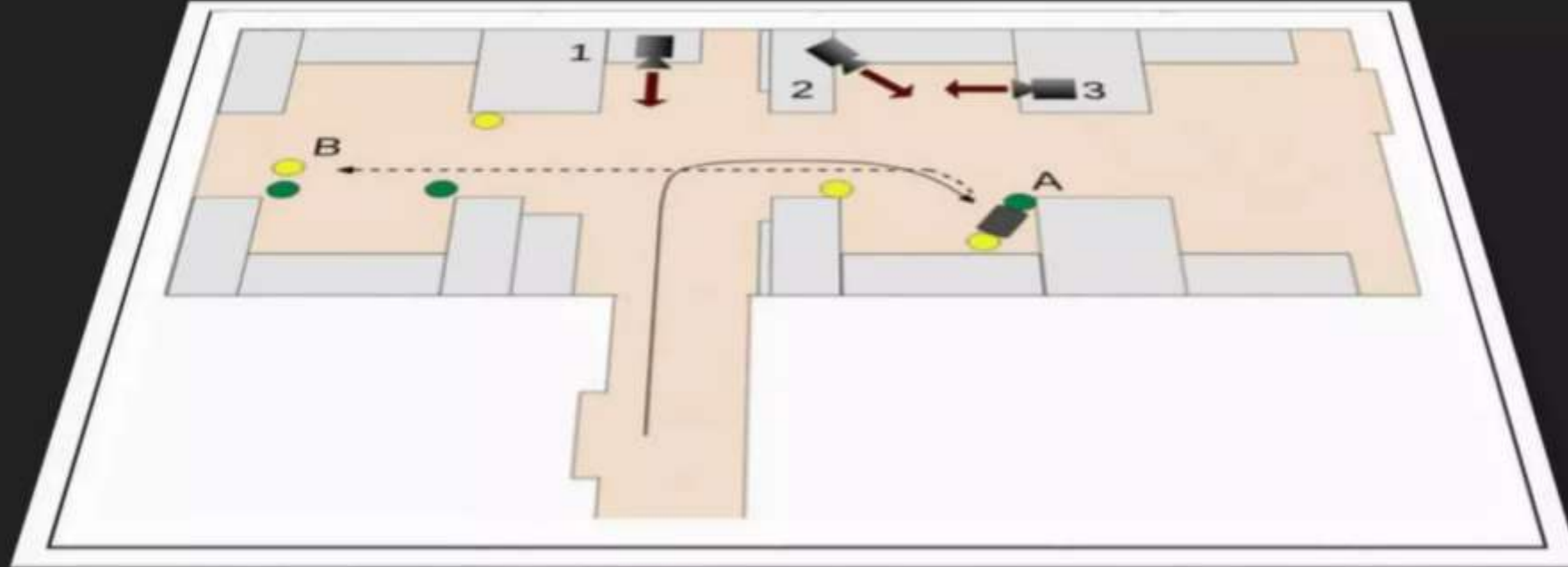


IoRT Applications

Application Type	Description
Systems Maintenance	Reduction in device and system failures
Manufacturing	Completely autonomous manufacturing with high precision accuracy and best quality.
Automation	Complete automation control for areas like Logistics, eCommerce and Warehouses.
Home Automation	Performing home activities and assisting in home security and doing personal tasks like education of kids, surveillance and day to day normal interactions.
Medical Assistance	Medical Surgeries, Elderly people assistance
Entertainment	Live interactions at public places like Cinemas, Shopping malls, museums and amusement parts.
Military	Battlefield monitoring, Drone Attacks, underwater monitoring and autonomous surveillance



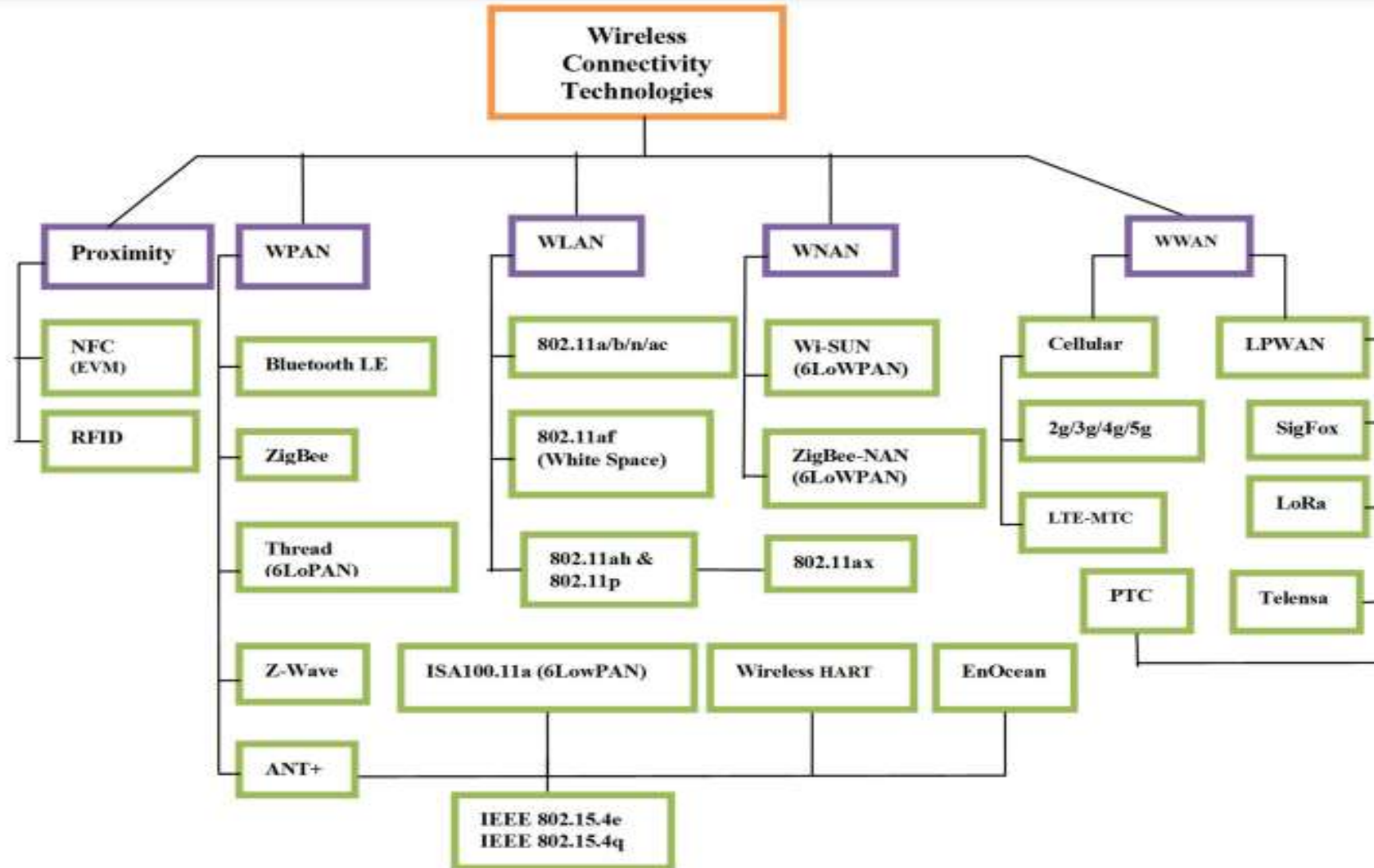
IoRT Applications



Distributed cameras assist the robot in locating a charging station in an environment. The charging station was placed between a green and yellow visual marker (location A). Visual markers of the same colours were placed elsewhere in the environment to simulate distractors. Visual processing is performed on-demand on the camera nodes to inform the robot that the charging station is at location A and not at the distracting location B

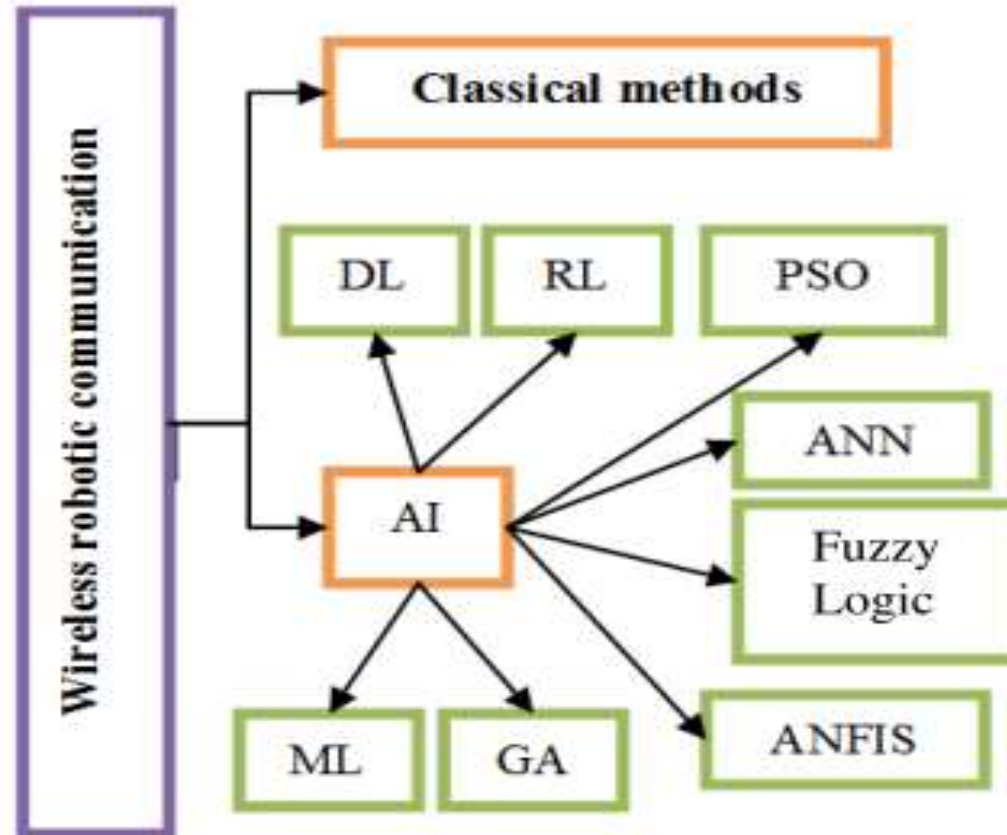


Wireless technologies used for data exchange in IoRT.





Wireless communication for robots using AI.





Robot and AI Data Exchange in different areas.

