

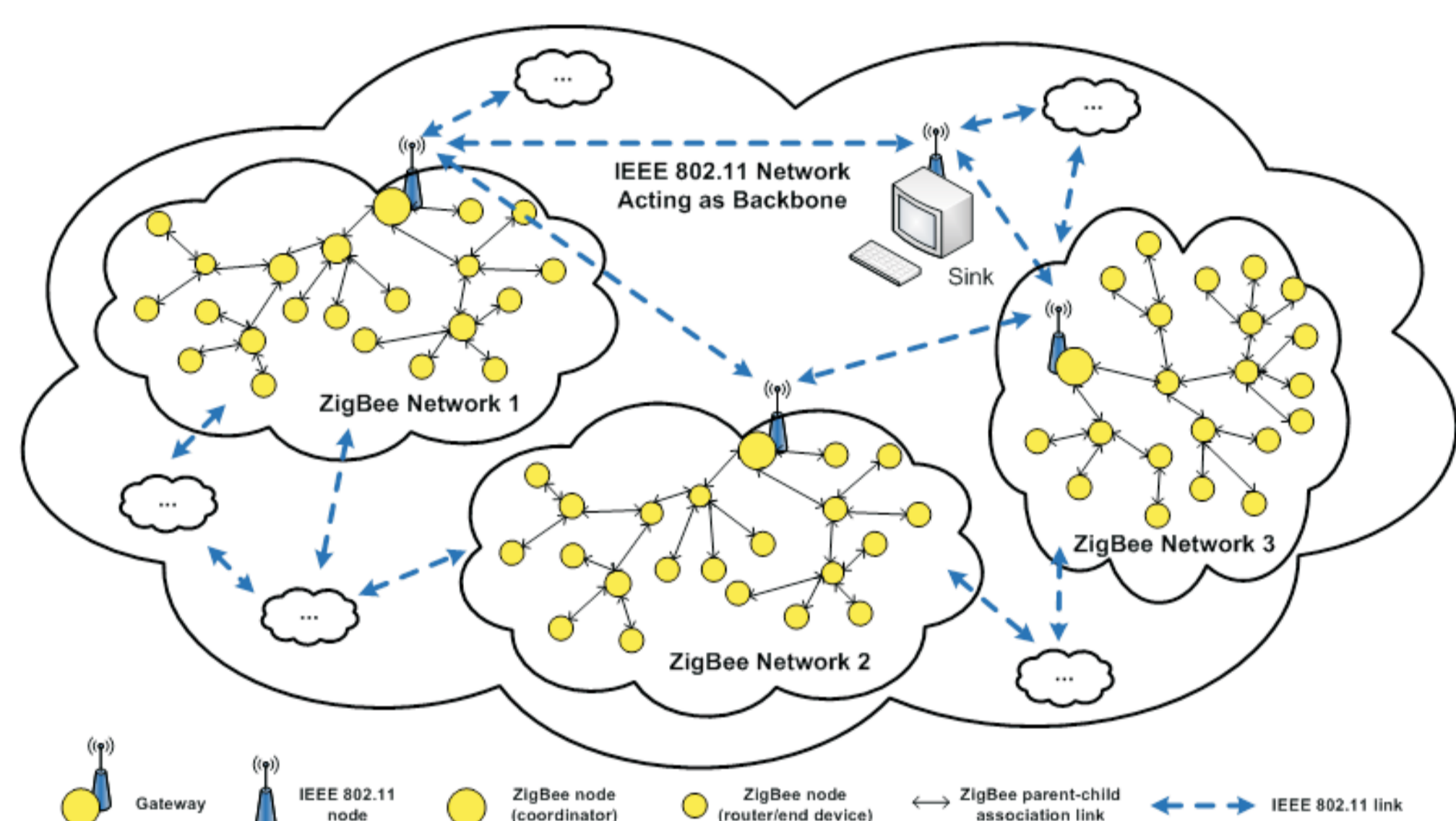
Engineering a Search & Rescue Application with a WSN - based Localization Mechanism

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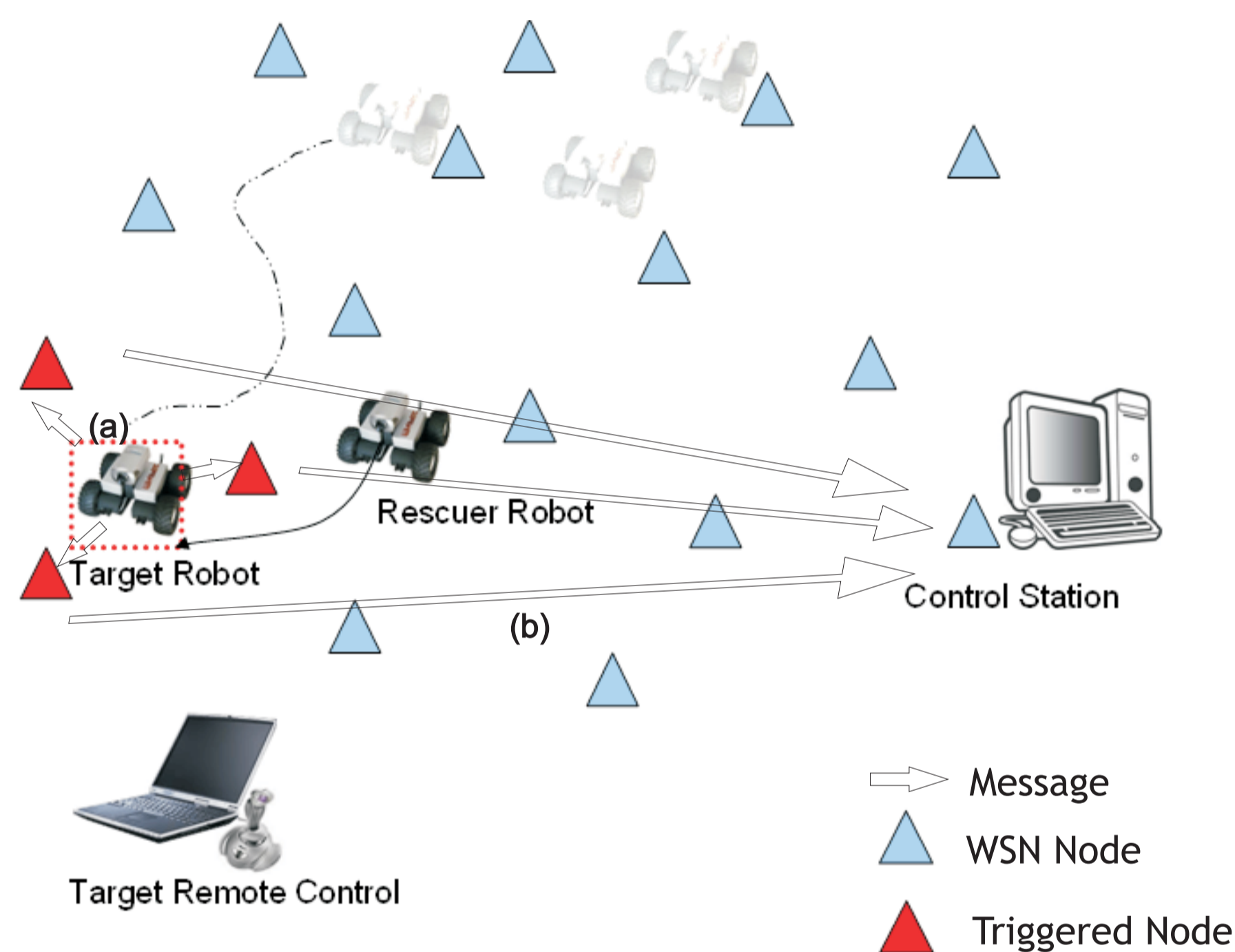


The ART-WiSe R&D framework aims at designing a two-tiered architecture to support QoS in wireless sensor networks. In this context, we have triggered the development of a test-bed application where a Control Station detects, localizes and tracks a target robot and instructs a rescuer robot until it gets close enough to the target, relying on information given by a RSSI-based localization mechanism.

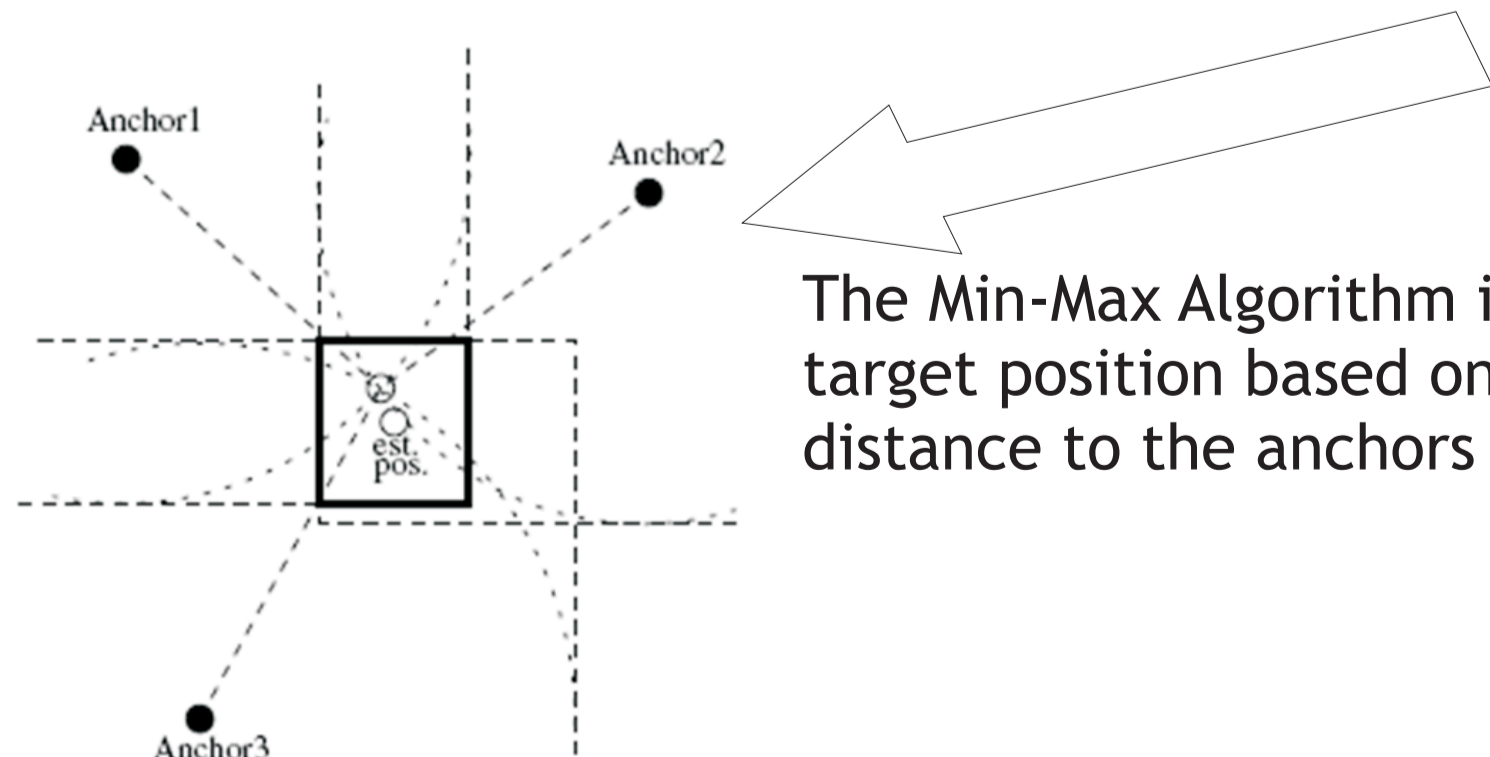
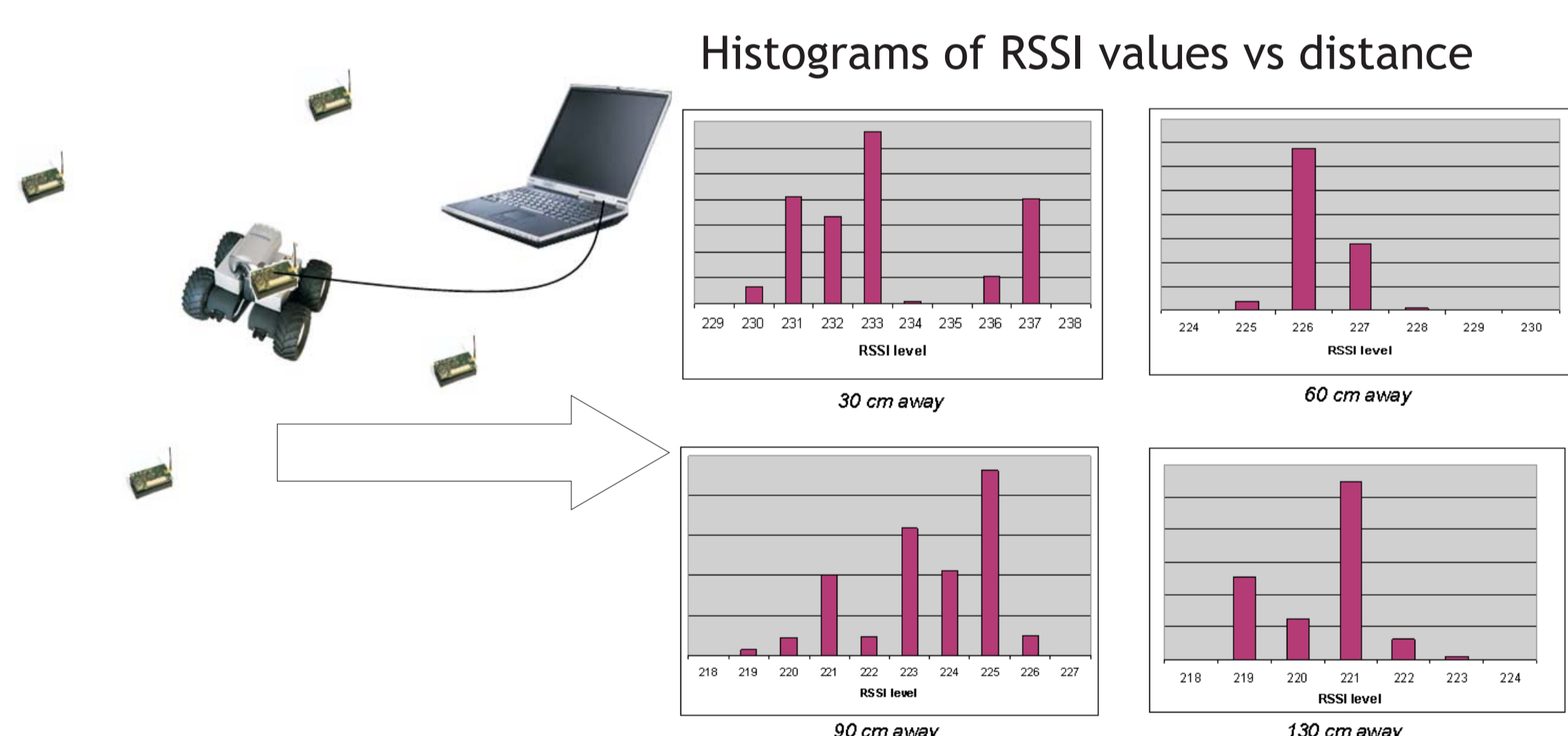
ART-WiSe Network Structure



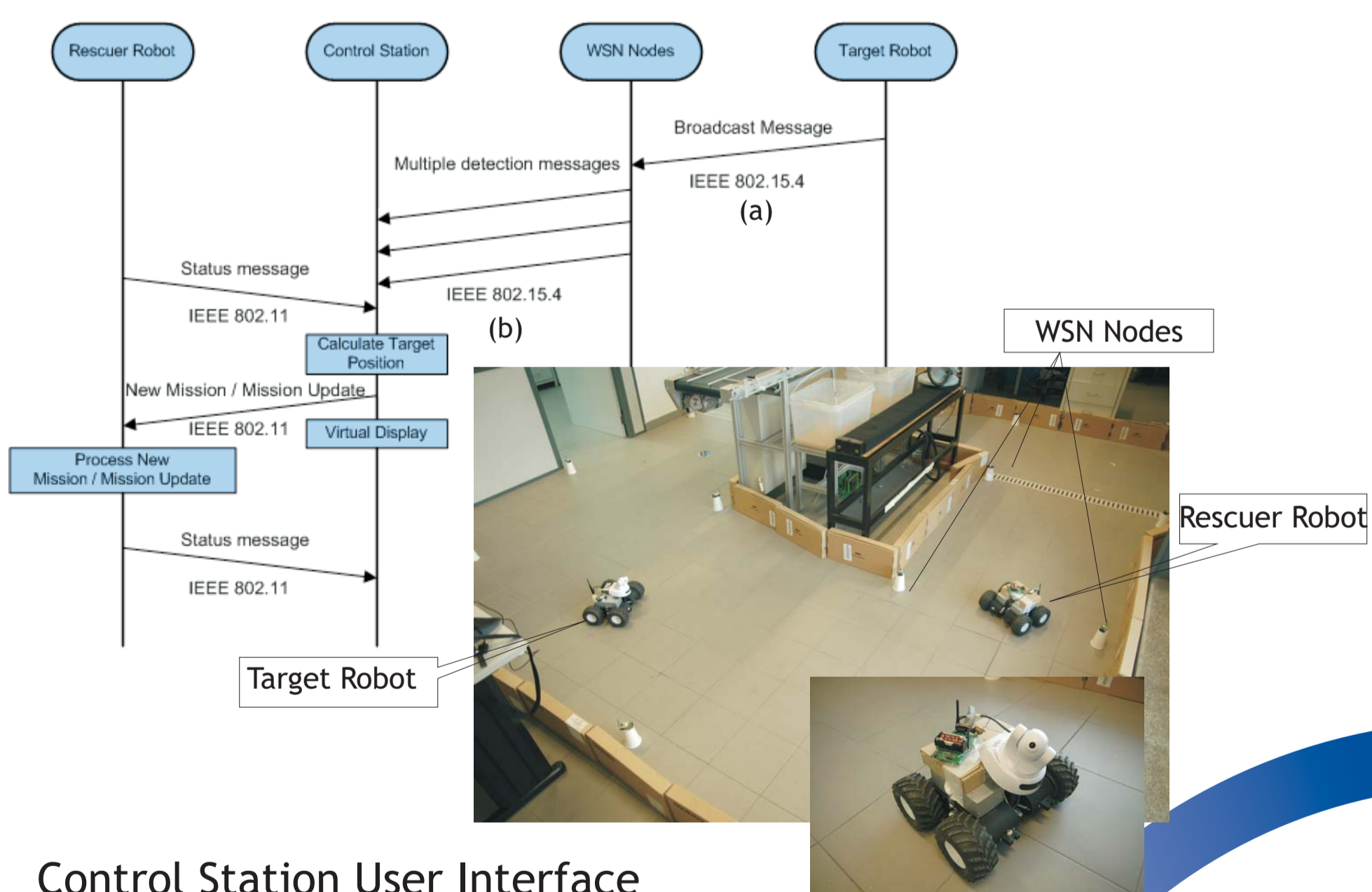
Application Snapshot



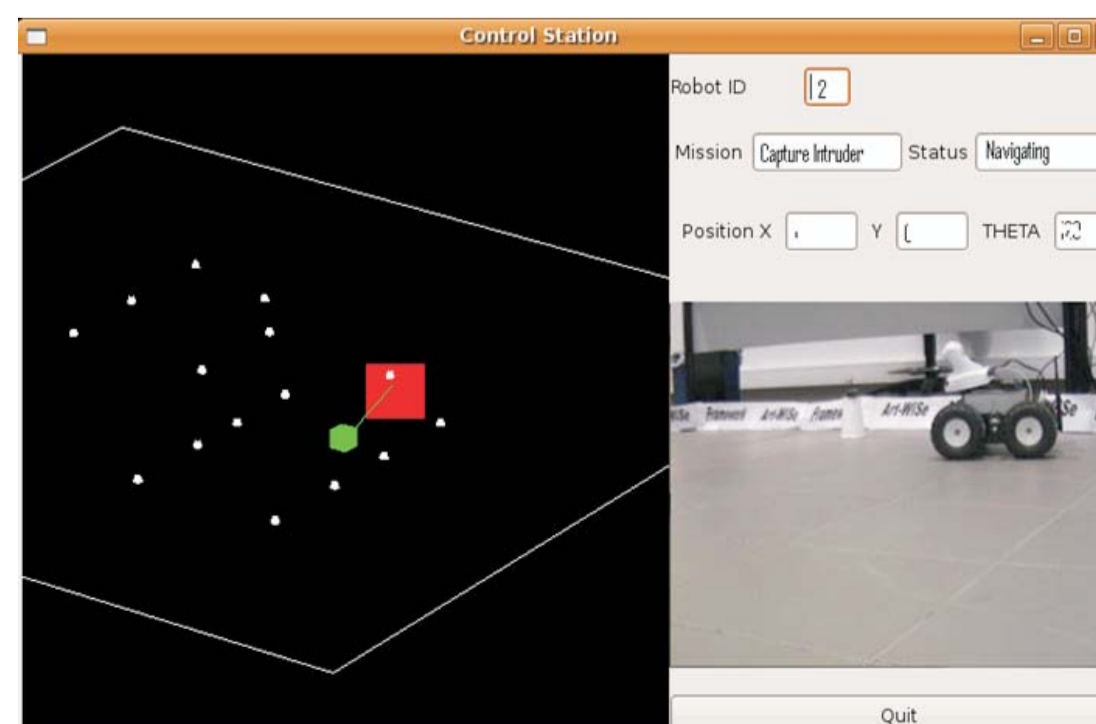
Localization Mechanism



The Min-Max Algorithm is used to compute target position based on the computed distance to the anchors



Control Station User Interface



IPP Hurray!



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