



ABSTRACT IDE0650

Urban Bilstrup and Per-Arne Wiberg,

An implementation of 3-tier hierarchical wireless sensor network

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Abstract - IN THIS PAPER AN IMPLEMENTATION OF A WIRELESS SENSOR NETWORK IS DESCRIBED. THE AIM WITH THE IMPLEMENTATION IS TO INVESTIGATE IF PRESENT DESIGN PATTERNS ARE APPLICABLE ON WIRELESS SENSOR NETWORKS. A 3-TIER MODEL IS ADOPTED AS A POSSIBLE CANDIDATE FOR THE SOFTWARE AS WELL AS FOR THE NETWORK ARCHITECTURE. THE IMPLEMENTED WIRELESS SENSOR NETWORK CONSISTS OF A HETEROGENEOUS SET OF HARDWARE DEVICES SUCH AS SENSORS, SENSOR HUBS, BEEPERS, PDAS AND CONNECTORS. MOST OF THE HARDWARE COMPONENTS ARE COTS AND MOST OF THE

SOFTWARE IS GNU LICENSED. ALL THESE FORM A 3-TIER HIERARCHICAL