

Ward standalone mode via Bluetooth mesh supporting dynamic configurations

Description
<p>Reliable alarming and monitoring of patients is fundamental in today's healthcare system. Televic Healthcare (THC) offers professional communication systems within the care sector for nurse call and recently launched a wireless call and localization system. THC wants to extend this system by developing new devices and applications.</p> <p>To enhance the reliability, the goals that a ward (department) can function autonomously in case of a failure. Therefore all calls still need to be distributed. As in next systems, the room controllers will have wireless connectivity to interface other devices. We could use this interface to distribute the calls.</p> <p>In this thesis you will investigate and implement this solution based on Bluetooth mesh. The solution should support a change in wards (e.g. at night) so that the routes get automatically updated.</p> <p>If you are interested in this topic, please also register this on the Televic website at: https://www.televic.com/en/careers/internships-and-students so we can confirm the topic is still available.</p>
Televic Company/Department:
<p>Televic develops, manufactures and installs top end high-tech communication systems for specific niche markets. A financially independent and stable group, Televic is divided into divisions that each focus on their specific market:</p> <ul style="list-style-type: none">• Televic Rail: passenger information systems and on-board control systems for trains• Televic Healthcare: communication systems for healthcare• Televic Conference: conference systems for large venues• Televic Education: multimedia and e-learning solutions for staff training and educational institutions <p>Televic creates added value for its customers by developing custom-made solutions and by continuously innovating at the cutting edge of technology.</p> <p>With headquarters in Belgium and offices and plants across Europe, Asia and the US, Televic employs nearly 700 people worldwide.</p> <p>About Televic Healthcare</p> <p>Televic Healthcare develops and manufactures high end solutions for nurse call, intercom, access control, patient entertainment and care registration for healthcare environments.</p> <p>Our state-of-the-art systems are adapted to the ever higher demands of an evolving market, and have been implemented in newly built and refurbished healthcare institutions across the world.</p>
Contact
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Nature of the work					
Level	Specialty	Type of work.	Location	Type of activities	Num of students
Bachelor, Master	Embedded Software	Research: 30% Implem.: 50% Experim.: 20%	Televic	Implementation, Literature study, Programming	1 or 2