



<b>Thesis Topic</b>	<b>Paradigms and Applications for Multi-Sensor Information Fusion (in cooperation with WEXNET)</b>
<b>Motivation</b>	New wireless area networks are shaping the future of urban innovation in smart-cities, enabling seamless connectivity and service-oriented paradigms supported by a strong infrastructure. In such a scenario, it is important to collect data coming from diverse sensor networks (heating, traffic control, etc.) - through i.e. LoRaWAN - in order to make them available in Open Data repositories and hence enable novel applications correlating those information. Multiple sensor data fusion can be leveraged by end users, coworkers or management staff in diverse applications including distributed monitoring for early warning, situation assessment and decision support.
<b>Tasks</b>	The thesis will address how to deal with multi-sensor information fusion through diverse network infrastructures, including LoRaWAN - in order to enable new services and applications that are useful to address current societal challenges and to support the development of new business opportunities. The student will survey the related literature on Open Data and Information Fusion, and develop relevant methods, models, tools and business cases. He/she will also have the opportunity to work in a lab on real equipment.
<b>Prerequisites *</b>	Basic courses on computer science and network engineering. Good grades achieved in related exams. Availability to work in Wexnet lab (Växjö) part of the time. Good motivation and ability to work on real equipment. Knowledge of current network protocols would be a plus.
<b>We offer you</b>	<ul style="list-style-type: none"><li>• <u>Preliminary meeting to clarify objectives and requirements.</u></li><li>• Support materials and lab equipment necessary to perform the required tasks.</li><li>• Fruitful industry cooperation opportunity.</li></ul>
<b>Time frame</b>	-
<b>Supervisor(s)</b>	LNU supervisors TBD. Industry co-supervisors from WEXNET.  For further information, please contact: <ul style="list-style-type: none"><li>• Dr. Francesco Flammini, Master Thesis Coordinator, <a href="mailto:francesco.flammini@lnu.se">francesco.flammini@lnu.se</a></li><li>• Dr. Diego Perez Palacin, Bachelor Thesis Coordinator, <a href="mailto:diego.perez@lnu.se">diego.perez@lnu.se</a></li></ul> Department of Computer Science and Media Technology