

2025 EECMS Summer Internship Application Form

Main Supervisor	Dr. Himanshu Agrawal, Curtin University
Other supervisors (if applicable)	Prof. Goutam Das, Indian Institute of Technology (IIT) Kharagpur
Project Title	Delay and energy efficiency modeling for eXtended Reality traffic for 6G
Student location(s) for the project	Indian Institute of Technology, Kharagpur, India
Duration of project	Six weeks
Project Description	<p>Extended Reality (XR) has already been recognized as a vital use case for 5G and beyond networks by the 3GPP group. XR end users are typically mobile, data-intensive, and characterized by limited battery life. Therefore, reducing energy consumption at the user's end becomes of paramount importance. In the conventional C-DRX scheme, users alternate between active and sleep modes in a periodic manner to conserve energy. Each user independently employs its own C-DRX strategy based on individual traffic and Service Level Agreements (SLAs).</p> <p>This project invites an intern to explore delay and energy efficiency modelling and simulation for Extended Reality (XR) traffic within the context of Industry 5.0. The project involves developing models to simulate the delay with energy efficiency of XR traffic and use optimization strategies to improve delay performance and energy efficiency to support seamless and sustainable XR experiences, contributing to the development of next-generation industrial networks.</p>