National Institute of Technology Rourkela

Departmental Seminar

Seminar Title : Performance Evaluation of GSSMM and EISPA in Mobile Edge Computing Environment

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Date and Time : 17 Mar 2025 (15:30)

Abstract : The rapid advancements in wireless communication result in demand for low-latency and energy efficient services.

Mobile Edge Computing (MEC) offers a promising solution by providing computational resources closer to end users, thus enhancing user experience and reducing the energy consumption of mobile devices. This paper uses a novel simulation environment to deploy and evaluate the Edge-Intelligent Service Placement Algorithm (EISPA). The parameter setting used in implementation demonstrates significant energy savings for EISPA, which reduces energy consumption by 41.07% compared to Gale-Shapley Stable Marriage Matching (GSSMM). The comparative analysis also highlights EISPA's ability to handle dynamic service demands effectively. Furthermore, the results reveal the robustness of EISPA

in adapting to varying network conditions, ensuring reliable service placement decisions.