CAPSTONE PROJECT 2024

Title: Smart Slice Selection in 5G: Unleashing the Power of ML

Domain: NETWORKING AND MACHINE LEARNING

Batch No: 100

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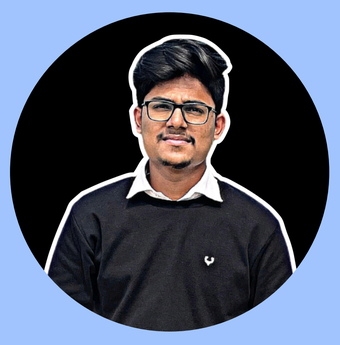

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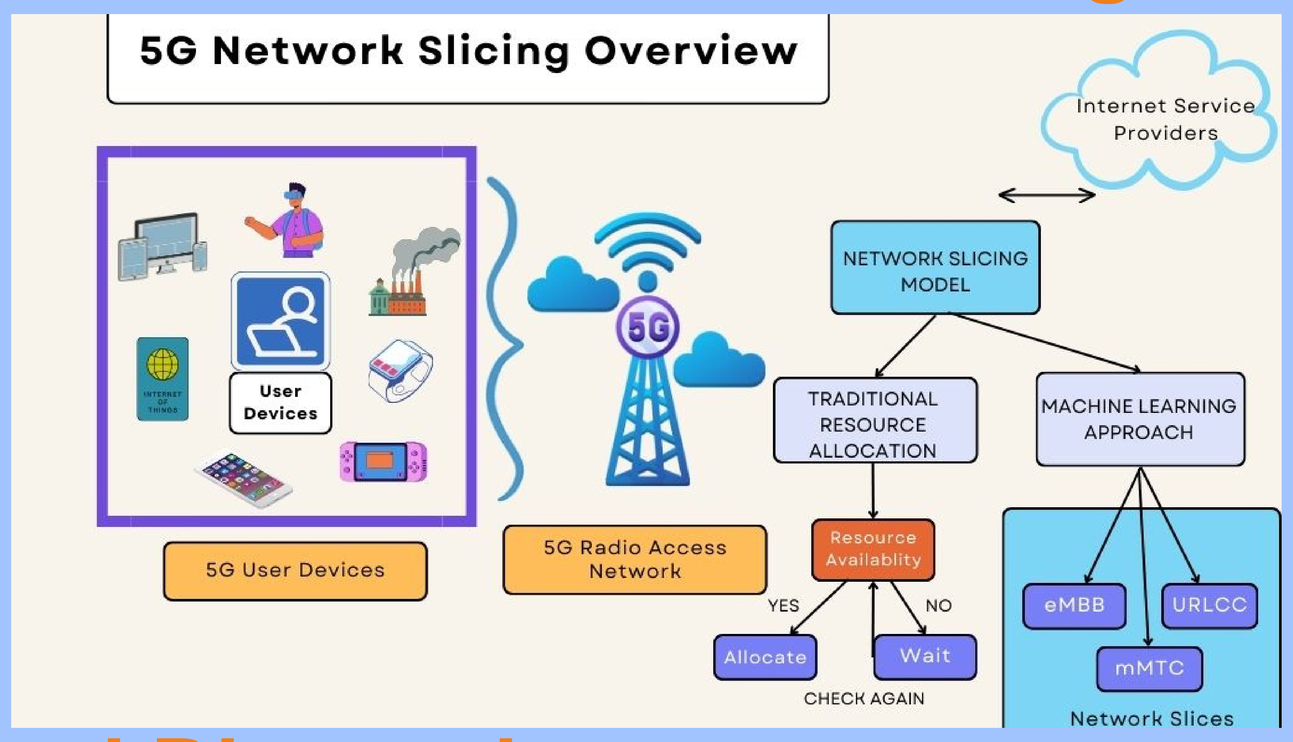
Abstract:

The study aims to compare Traditional and Machine Intelligence approaches, focusing on determining which method offers the most accurate resource allocation to the slices. This research endeavors to provide insights into the efficiency of different approaches in addressing the intricate challenges of resource allocation in the context of 5G network slicing, contributing to the advancement of this transformative technology.

Architectural Flow / Data Flow Diagram:



Results and Discussion:

- Used Dynamic Resource Allocation for testing in 5G Architecture.The results of 4 Networks in simulated enviornment exhibit variations in thier base station structures and configurations.
- Applied various ML classifiers and AdaBoost performed best with (73%), followed closely by Random Forest (71.67%), Later on Selected models were stacked to adjust in various scenarios.