

Project: 5gRAN_CICD_Testing

Company: Radisys India Pvt Ltd

Duration: 6 Months

Objective: To create test cases for 5G gNB using Robot framework, on X86 PAL Setup.

Tech Used: Robot Framework, Test Automation, Wireshark files validation, 5G Core Network & gNB.

Summary:

Fifth-generation wireless (5G) is the latest iteration of cellular technology, engineered to greatly increase the speed and responsiveness of wireless networks. A 5G Base Station uses New Radio (NR) technology and is referred to as a gNodeB.

While working as an intern, I was involved in the CI/CD testing of gNodeB Software on X86 PAL Setup. Test Cases were written in Robot Framework for various Interfaces (like Interface between Mobile & gNB, between gNB & Core Network) & features (multi-UE addition, NGRESET, RRC_RESUME etc). My job was to add new Test Cases, identify failure reasons of failed Test cases, correct them, or raise any bug if there in software.

In the 6 months, more than 35 test cases were added and also bugs were reported in gNB(CU + DU).