



Welcome back to the OpenAirInterface workshop!

For this new fall edition we have thought about giving a new shape for our bi-annual event. In fact, this workshop is the **first** where we at OAI, besides giving the status and roadmap update, are **show-casing our technology through demos and hands-on classroom sessions**.

Throughout this event, you will learn how to **build, deploy and run** the **OAI code – all hands-on**. We shall address all three project groups: 5G RAN, 5G CN & MOSAIC 5G.



Challenge #1: Creating a SM

Goal: Design a FlexRIC Service Model (SM) that monitors the statistics of the PHY or RRC layers

1. We encourage the participants to read 3GPP specifications to identify the most relevant statistics
2. The SM shall implement the plain, ASN.1 and Flatbuffers encoding and decoding schemes in C11
3. A test file needs to be delivered similar to the PDCP SM that it has been provided

Validation of the solution:

The winning solution shall provides:

1. A working demo
2. Has no memory leaks, undefined behavior or is not thread safe

Awards

1000 euros



Deadline for Code Submission



Programming Challenges: MOSAIC 5G

OAI Workshop Fall 2021 American and European Edition

Why participate?

1. Directly contribute to the world largest open source 5G project
2. Get big bonus and gifts
3. Get open-source contributor certification, your contribution will be recorded!



Challenge #2: PDCP xApp

Compute the throughput and loss rate per UE and per BS for TX and RX, and visualize it over time (e.g matplotlib)

Awards

500 euros

Validation of the solution: The winning solution shall provides a working demo

Challenge #3: RLC xApp

Compute the RLC throughput and ARQ retransmission statistics in last 1 second in terms of median, avg, deviation for TX, and visualize them over time (e.g matplotlib)

Validation of the solution: The winning solution shall provides a working demo

Awards

500 euros

Challenge #4: MAC xApp

Compute the aggregated throughput rate per UE/RNTI for TX and RX, and visualize it over time (e.g matplotlib)

Validation of the solution: The winning solution shall provides a working demo

Awards

500 euros

Important dates:



1) Deadline for Code Submission



2) Award notification
(might be delayed regarding the number of participants)

Submission process: by email

Contact: workshop@openairinterface.org