

Assistant (Student)

## Working Student for Testbed on 5G/6G RAN

In this work, expected result is to enhance the 5G/6G testbed setup with several additional features mainly focusing on the Radio Access Network (RAN). The student is expected to work on the OpenAirInterface (OAI) [1] platform which is the basis of the testbed setup. Expected outcome is to have improvements to the RAN of OAI including but not limited to wireless channel estimation and equalization, Uplink (UL) resource scheduling, and power boosting. More details will be provided after the first meeting.

[1] N.Nikaein, M.K. Marina, S. Manickam, A.Dawson, R. Knopp and C.Bonnet, "OpenAirInterface: A flexible platform for 5G research," ACM SIGCOMM Computer Communication Review, vol. 44, no. 5, 2014.

### Prerequisites

- Good C/C++ experience
- Medium knowledge on OFDM and Wireless Channel Estimation
- Good Python knowledge is a plus
- Machine Learning understanding is a plus

### Contact

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### Advisors

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