Forschungspraxis

Evaluation of Communication Mechanisms in 5G Control Plane

As the architecture of the 5G Core has already been standardized and it is fundamentally different from the previous generations, a question rises regarding the efficiency of the communication mechanisms that will be used for the communication between Network Functions (NFs) inside the 5G Core Network.

In this project, the student will evaluate these mechanisms used in an open-source implementation of the 5G Core (https://www.free5gc.org/), and propose improvements that will increase the performance and scalability of the Core Network (e.g., serialization, protocols, etc.).

Prerequisites

- General knowledge about Mobile Networks (RAN & Core).
- Motivated to learn more about the communication side of the Mobile Core Networks.
- Strong programming skills. Knowledge of Go (https://golang.org/) is a plus.

Contact

endri.goshi@tum.de

Advisors

Endri Goshi