Controlling Stochastic Network Flows for Real-time Networking

Any data that is sent in a real-time network is monitored and accounted for. This allows us with the help of some mathematical frameworks to calculate upper bounds for the latency of the flow. These frameworks and controllers often consider hard real-time guarantees. This means that every packet arrives in time every time. With soft real-time guarantees, this is not the case. Here, we are allowed to have some leeway.

In this thesis, we want to explore how we can model and admit network flows that have a stochastical nature.

Please contact me for more information (philip.diederich@tum.de)!!

Advisors
Philip Diederich