

Master's Thesis

# Backward Compatible Multi-Path Routing

Multi-path routing is an important enabler of load balancing, resilience and traffic engineering in communication networks. However, in practice carrier networks are rarely deploy these methods owing to the required architectural changes, such as the application of shim headers, deployment of middleboxes, and hence, the lack of backward compatibility. The task of the student is to develop and implement a multi-path routing architecture by extending the current OSPF routing protocol with the ability to choose between multiple (two) next hops based on the value(s) of the traditional IP header fields and the available OSPF routing information.

## Advisors