# Communication Networks Spring 2025



Slides form Tobias Bühler



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### **Communication** Networks

Exercise 8

**Routing Project** 

Introduction to this week's exercise

Time to solve the exercise

### **Routing Project**

#### Today: Last in person Q&A session

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## Task 8.1

Putting everything together



For each router and prefix, find the selected egress and next hop

# Task 8.1 Putting everything together



#### Remember the decision algorithm

### Task 8.2

### Traffic (not so much) Engineered



AS 10

Remember: Forwarding is based on longest-prefix matching



Explore different scenarios with various success and visibility



Assume victim always prefers its own internal route to reach 20.0.0/22



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#### AS path poisoning

Attackers abuse BGP's loop prevention mechanism

Add specific ASes to the path



Assume victim always prefers its own internal route to reach 20.0.0/22

AS path poisoning

Attacker can target specific ASes with the hijack

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