# Research Project or Master Thesis- TSN over 5G

Chair of Communication Networks TU Chemnitz

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### Introduction

Exciting thesis opportunity in networking and communication, focusing on Time-Sensitive Networking (TSN) standards and 5G Systems integration, particularly IEEE 802.1Qbv and challenges in 5G networks.

#### Background

TSN and 5GS integration presents unique challenges for QoS in mission-critical applications, enhancing reliability and latency in advanced 5G networks.

## **Research Objectives**

Develop and extend an optimization scheduling model for TSN-5G networks to address 5G's indeterminism using gamma robust scheduling techniques.

#### **Candidate Profile**

- Took the elective course 'Optimization for Non-Mathematicians'
- Took the course 'Mobile Networks'
- Knows Python
- Knows or is interested in Deep Learning / Reinforcement Learning
- Used Omnet++

## Apply

Highly motivated students interested in cutting-edge research, send CV and Leistungsübersicht to syed-tasnimul.islam@etit.tu-chemnitz.de with subject: Application for TSN-5G Thesis/Research project.