

## Abschlussvortrag Masterarbeit Arunprasad Arangan Ramakrishnan

"Design and evaluation of a digital twin-based parking management system for future smart cities"

With increasing populations and mounting vehicular communities in current urban settings, the requirement for proper parking management has grown to be of critical importance. Traditional parking management systems face several challenges, including poor space utilization reservations, traffic jams, and spotty information. This research ventures into the world of Digital Twin-Based Parking Management Systems to transform our approach toward designing, developing, and improving urban parking spaces. This study mainly aims to advance parking management through Digital Twin technology, which utilizes real-time data collection, cloud infrastructure, and advanced analytics to optimize parking space utilization by introducing predictive analysis for better allocation of resources. Therefore, different approaches were investigated and evaluated based on previously recorded data sets in order to investigate the applicability of smart, Al-based parking solutions.

Betreuer der Arbeit: Prof. Dr. Andreas Rausch, PD Dr. Christoph Knieke

Datum: Montag, 17. Juni 2024, 16:00 Uhr

Ort: Online-Meeting über BBB

Link: <a href="https://webconf.tu-clausthal.de/rooms/sim-uc9-rvy/join">https://webconf.tu-clausthal.de/rooms/sim-uc9-rvy/join</a>