

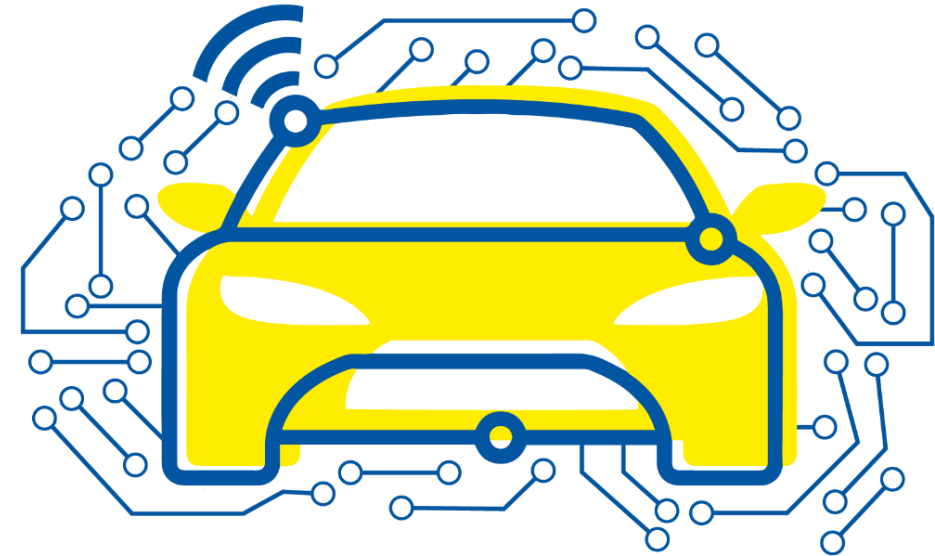
# Automated and Connected Driving Challenges

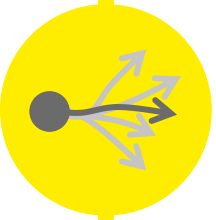
## Section 4 – Vehicle Guidance

### Vehicle Guidance on Stabilization Level Tasks

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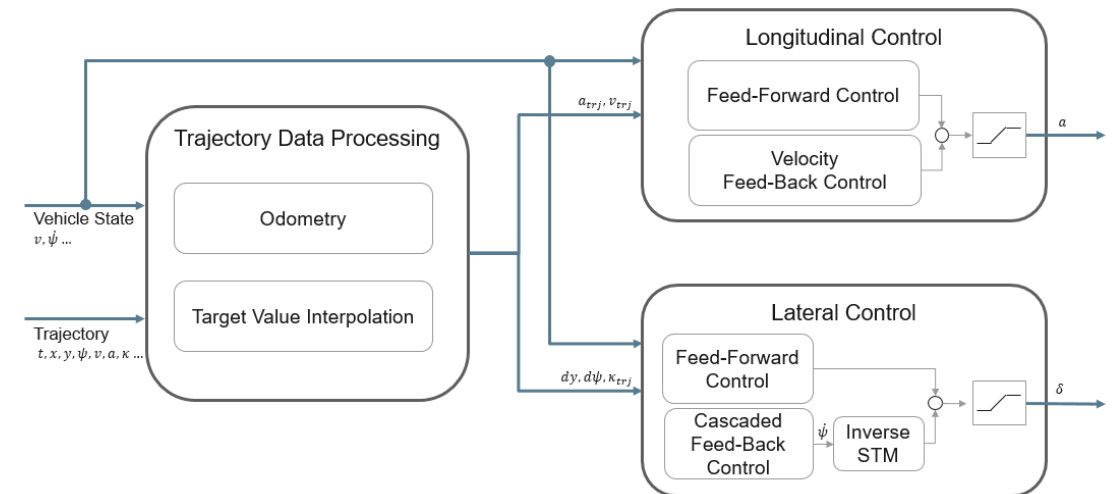


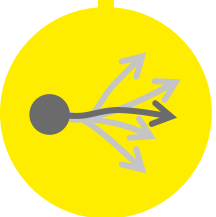
# Vehicle Guidance on Stabilization Level – Tasks

## *Trajectory Control*

### Assignment: Trajectory-Control using Feedback-PID-Controllers

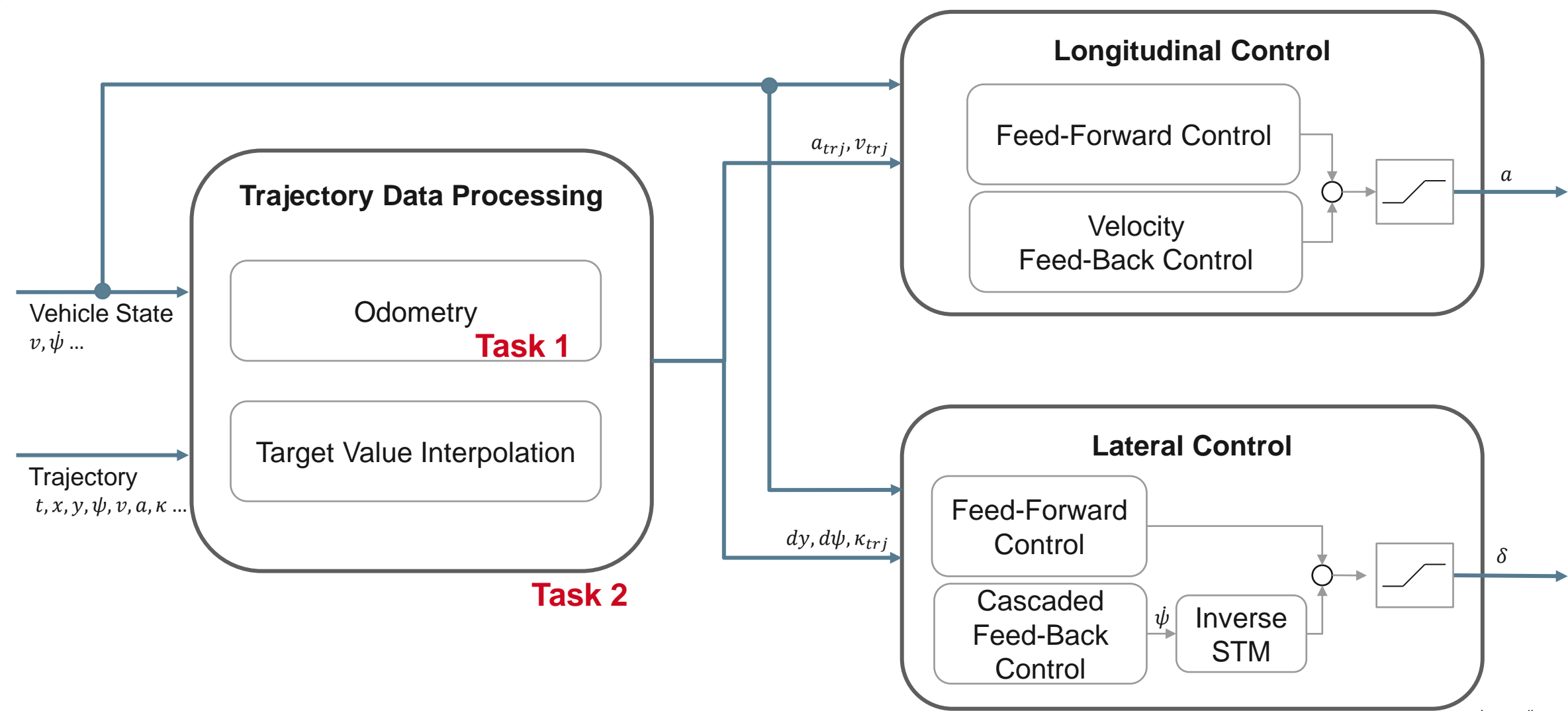
- Derive odometry equations
- Calculate control variables
- Implement the output equation of an PID-Controller
- Integrate into a longitudinal and a lateral controller
- Using an inverse single-track model
- Based on the previously implemented trajectory-planning approach

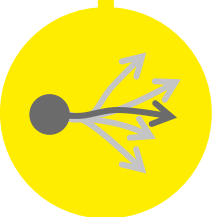




# Vehicle Guidance on Stabilization Level – Tasks

## Controller Structure





# Vehicle Guidance on Stabilization Level – Tasks

## Controller Structure

