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- o () Magic Formula
- 4 (Wheel Speed Sensors) IMU (G /)

?????? (Simulation)

- MATLAB/SIMULINK
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- SIMULINK TC
- TC

?????? (Implementation)

- SIMULINK C/C++ (Embedded Coder)
- TC VCU ()
- CAN Bus** VCU (100Hz+) 4 (Inverter)
- (**Logging**)

???????? (Validation & Tuning)

- A/B Test
- (**Tuning**) * Target_Slip_Ratio (10%? 15%?)
- o **PID** TC Kp, Ki, Kd TC
 - o (Harsh)
 - o (Soft) TC

3. ???? (Validation Process)

A/B Test TC (ON) vs TC (OFF)

3.1 ???? (Data Logging)

[] TC

[(100Hz+)]

- TCS_Active (): TC (1= , 0=)
- Slip_Ratio_FL, Slip_Ratio_RR: () /
- Target_Slip_Ratio: ()
- Requested_Torque: ()
- Commanded_Torque: (TC)
- Wheel_Speed_FL, FR, RL, RR: ()
- Longitudinal_G: (IMU) G ()
- Yaw_Rate: (IMU) ()

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1. (0-60kph)

- **TC OFF** ()
 - Slip_Ratio Wheel_Speed_RR Wheel_Speed_FR
Commanded_Torque = Requested_Torque
- **TC ON** ()
 - TCS_Active 1 -> Commanded_Torque < Requested_Torque ->
Slip_Ratio Target_Slip_Ratio
 - 0-60kph Longitudinal_G

2. (Corner Exit)

- **TC OFF** ()
 - -> Yaw_Rate ->
 - (Spin)
- **TC ON** ()
 - TCS_Active -> Yaw_Rate ->

3.2 (Video Recording)

[] TC

- [1] GoPro
 - **TC OFF**
 - **TC ON**
- [2] GoPro
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 - TC
- [3]
 - **TC OFF** (Fishtail)
 - **TC ON**

