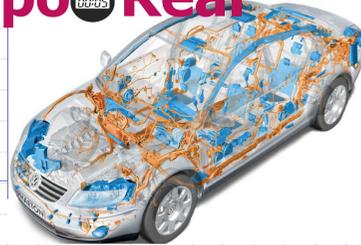




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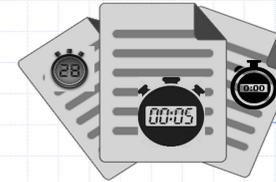
Especificação de Sistemas de Tempo Real



Prof. Dr. Jorge Rady de Almeida Jr.

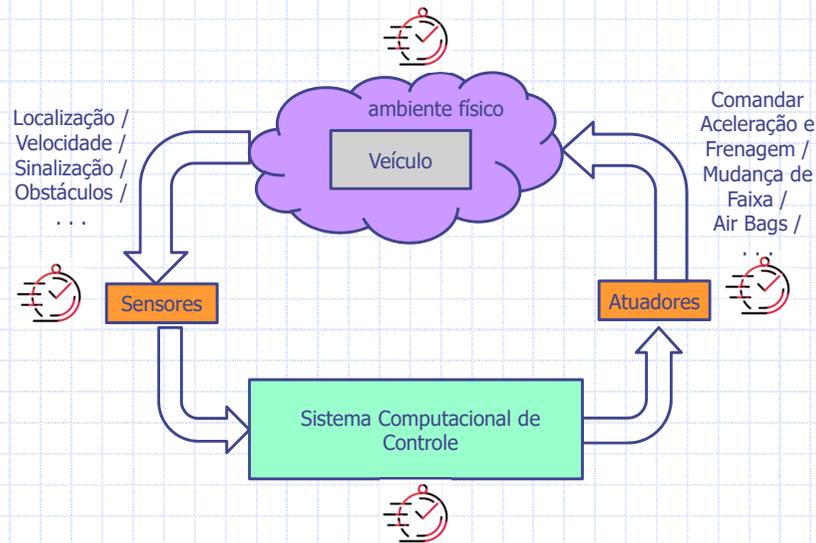
1

Sistemas de Tempo Real em Veículos



2

STR e o Sistema sob Controle



3

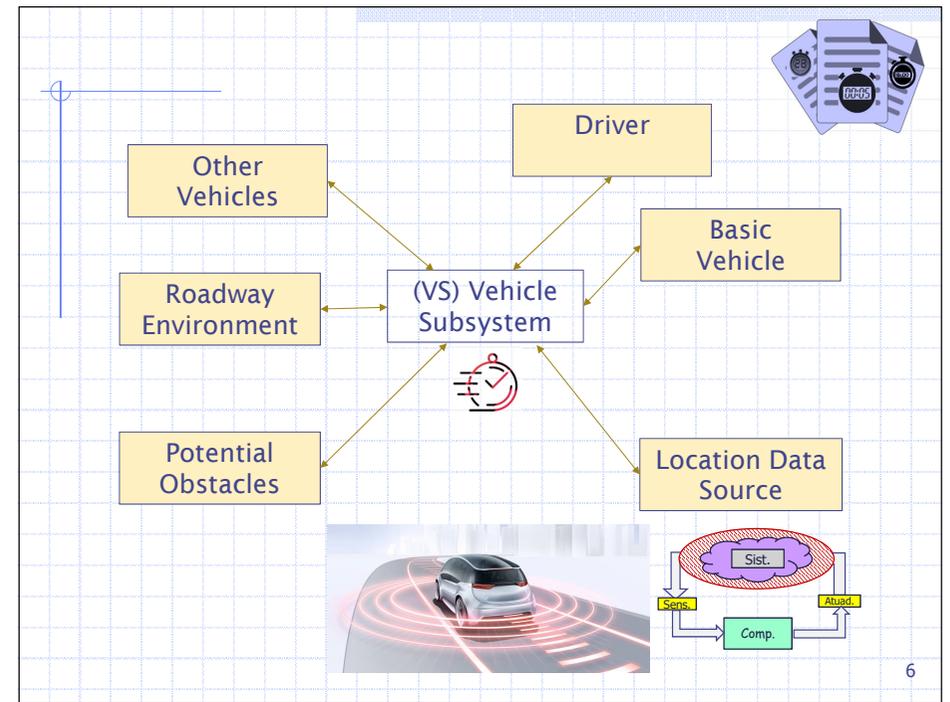
- **Cyber** – computation, communication, and control that are discrete, logical, and switched
- **Physical** – natural and human-made systems governed by the laws of physics and operating in continuous time
- **Cyber-Physical Systems** – systems in which the cyber and physical systems are tightly integrated at all scales and levels



4

Definições

- ◆ ITS – Intelligent Transport System
- ◆ IV – Intelligent Vehicles
- ◆ Sistemas IV – sentir o ambiente que envolve o veículo de forma a poder auxiliar o motorista na condução segura do veículo
- ◆ CPS – Cyber Physical System: mecanismo monitorado/controlado por computador, integrado à internet
- ◆ ACPS – Automotive CPS



Segurança Automotiva

- Frenagem /ABS
- Air Bags
- Rota a Seguir
- Velocidade
- Aceleração
- Semáforos / Sinais
- Estacionamento
- Obstáculos

