

# 車輛工程系 Department of Vehicle Engineering

## 車輛動態與控制 Vehicle Dynamics and Control

### 系統動態模擬與控制實驗室 System Dynamics Simulation and Control Lab.



O: 綜科 526-11  
#3625

L: 綜科 112-2  
#3679

陳志鏗 副教授  
Associate Prof. Chih-Keng Chen

凱斯西儲大學  
Case Western Reserve University

[ckchen@ntut.edu.tw](mailto:ckchen@ntut.edu.tw)

#### 研究領域

車輛動態與控制、車輛電控  
煞車、混合動力車控制、油  
氣壓系統控制、有限元素分  
析

#### 近期研究主題

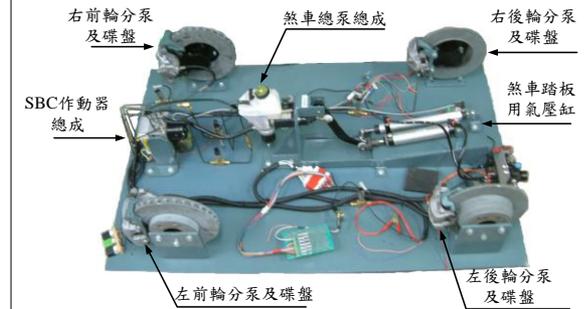
- 二輪車動態與穩定控制
- 液壓傳動與控制系統
- 液壓混合動力車控制
- 主動式車輛防撞系統
- 車身動態穩定控制系統
- 機械結構設計分析
- 液壓泵與馬達分析

#### Research Area

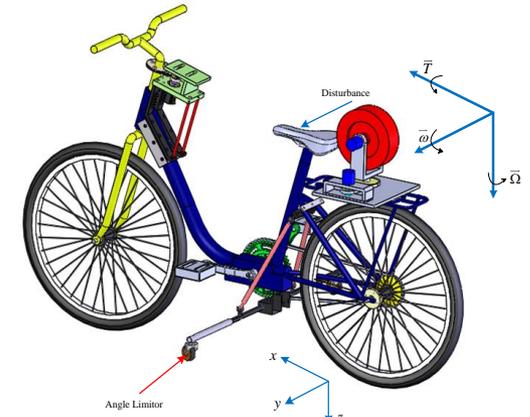
Vehicle dynamics and control,  
Vehicle electronic brake system,  
Hydraulics and pneumatics system  
control, Finite element analysis

#### Recent Topics

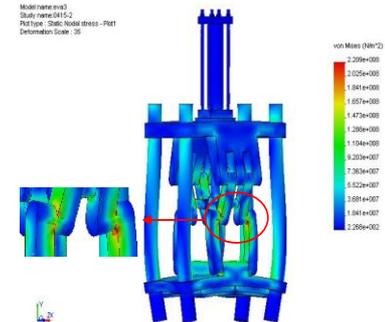
- Two-wheel vehicle dynamics and stability control
- Hydraulic Transmission and control
- Control of hydraulic hybrid vehicle
- Autonomous emergency braking
- Vehicle stability control system
- Design analysis of mechanical structure
- Analysis of hydraulic pumps and motors



車輛煞車實驗系統開發  
Developing vehicle brake test system



二輪車平衡系統  
Balanced system for two-wheel vehicle



結構強度及運動效能分析  
Analysis of structure strength and its motion