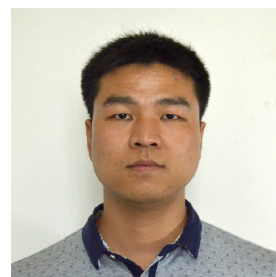


KAI LIU | RESUME



- » Status: Ph.D., Intelligent Vehicles, Beijing Institute of Technology (BIT)
- » Skills: Matlab, C++, ROS, Vrep, CarSim, LabVIEW
- » Interests: Motion planning and control, Machine learning
- » Experiences: Intelligent Vehicle Future Challenge in 2009 and 2013

Summary

- Dynamic modeling and analysis of high-speed autonomous ground vehicle
- Optimal motion planning and control for high-speed AGVs with hazard avoidance
- Stabilization handling of AGV with time-varying speed using envelope control

Experience

'10/07 - '13/07	Developer	CAS
	<ul style="list-style-type: none"> » Electric vehicle research and development center, Shenzhen Institute of Technology » Electric system design of an in-wheel motors driven electric vehicle » Data acquisition and communication, information display with TMS320LF2407 » In-wheel motors control 	
'09/12 - '10/03	Intern	CARS
	<ul style="list-style-type: none"> » Vision based object identification with OpenCV 	

Education

2013 - now	Ph.D., Automotive engineering	BIT, China
	<ul style="list-style-type: none"> » Thesis: Optimal motion planning and control for high-speed autonomous vehicles » model predictive control, active steering, obstacle avoidance 	
2015 - 2017	Visiting scholar, Center for Automotive Research	OSU, USA
	<ul style="list-style-type: none"> » Topic: Dynamic modeling and control of high-speed autonomous vehicles for lane change maneuver » handling stability, envelope control, advanced driver assistance system 	
2008 - 2010	Master's Degree, Mechatronics Engineering	BIT, China
	<ul style="list-style-type: none"> » Thesis: Study of architecture system and navigation technology of unmanned ground vehicle » GPS/IMU data fusion, localization, navigation, hazard avoidance, enhanced Vector Polar Histogram (VPH+) 	
2004 - 2008	Bachelor's Degree, Mechanical Engineering and Automation	BIT, China
	<ul style="list-style-type: none"> » Design and implementation of control system for wire-stripping machine 	