会议手册
EVENT GUIDE

SAE INTERNATIONAL

SAE 2019 NEW ENERGY & INTELLIGENT CONNECTED VEHICLE TECHNICAL CONFERENCE

新能源与智能网联汽车技术大会

5 月 21-22 日 上海颖奕皇冠假日酒店

May 21-22 · Crowne Plaza Shanghai Anting Golf, Shanghai, China

赞助商 SPONSORS

特别鸣谢以下公司对SAE 2019 新能源与智能网联汽车技术大会的大力支持。

A special thank you to the following companies who have graciously agreed to sponsor special programs and activities at the SAE 2019 new energy & intelligent connected vehicle technical conference.

ANALOG DEVICES
超 越 一 切 可 能 ™

KEYSIGHT TECHNOLOGIES

论坛期间使用的应急预案

在SAE 2019 新能源与智能网联汽车技术大会期间，若紧急情况发生，参会者须遵守规定的应急预案。靠近事件地点的参会者须向最近的论坛组织者和/或警卫人员报告，或向位于注册中心的SAE运行办公室报告。

如果发生灾难性事故，参会者须遵守事件发生时场馆发布的安全指令，其中包括听从公共广播系统提供的指令，并按指定路线撤离。

如果在本次活动过程中发生了紧急情况，或因故中断活动日程，那么参会人员与展商可拨打该号码了解活动恢复的情况。事件更新将在SAE官网http://www.sae.org上提供。

SAE紧急热线：　　中国：+86-21-6140-8900　　美国：+1-800-581-9295

目录

WHATS INSIDE

EMERGENCY PROCEDURES

During the SAE 2019 New Energy & Intelligent Connected Vehicle Technical Conference attendees are to follow the established emergency guidelines of the facility where the emergency occurs. Based on the location of the incident, report emergencies to the nearest venue representative and/or security personnel if available, or report to the SAE operations office located in the Registration Center.

Should a catastrophic event occur, attendees should follow the safety and security instructions issued by the facility at the time of the event. This includes listening for instructions provided through the public address system and following posted evacuation routes if required.

In the event of an emergency or a major disruption to the schedule of events at the SAE 2019 New Energy & Intelligent Connected Vehicle Technical Conference, attendees and exhibitors may call this number to receive further information about the resumption of this event. Updates will also be provided via the SAE website at http://www.sae.org

SAE EMERGENCY HOTLINE: **+86-21-6140-8900(China)** **+1-800-581-9295 (U.S.)**

中文微信公众号

SAE International 国际自动机工程师学会是航空航天、汽车、商用车及工程农用机械领域权威性专业学会。相对于其他机构，SAE 制定的车辆和航空航天标准在行业内占据绝对优势。同时，SAE 还提供全球最丰富的航空航天、汽车、商用车及工程农用机械领域的工程信息，并拥有全球性的车辆及航空航天工程师社交网络。

我们通过全面的项目、产品和服务，为行业提供信息、工具和技术，以帮助专业人士更好地完成工作，并保证下一代业内工程师能够获得良好的职业发展。

自 1905 年起，SAE 就开始建立航空航天、汽车、商用车及工程农用机械领域的工程师网络，整合他们所需要的技术资源，以满足他们终生学习的需要，推动行业技术的进步与发展。

SAE International 第一任副主席是一个名叫亨利 • 福特（美国福特汽车公司创始人）的才志兼备的工程师，在最早的发展阶段，SAE 就获得了奥维尔 • 莱特（飞机发明人之一）等人的支持。在此基础上，我们建立了一个紧密合作、信息互通的广泛的中立性平台，并制定了许多首创标准。今天，SAE 已经成为了全球公认最权威的航空、汽车、商用车及工程农用机械工程知识来源，而信息共享仍然是我们的基本原则。

English WeChat Subscription Account

A professional society, SAE International is the authority on vehicle engineering. We develop more vehicle technical standards—and more aerospace standards—than any other organization. We offer the largest library of vehicle engineering content. And, we bring together the largest global network of engineers in the world.

Through a comprehensive collection of programs, products and services, we supply the information, tools, and technical know-how to help today's professionals do their jobs better while we ensure the development of the next generation of mobility engineers.

Since 1905, SAE has connected automotive, aerospace, and commercial vehicle engineers to each other and the technical resources needed to foster a lifetime of learning, solutions to improved vehicle technology, and the advancement of the mobility industry.

SAE International—whose first vice president was an up-and-coming engineering talent by the name of Henry Ford and included early supporters like Orville Wright—was based on providing a platform for collaborative and informed dialog and the impetus of its earliest standardization efforts. Today, the sharing of information remains at its core, with SAE being acknowledged globally as the ultimate knowledge source for mobility engineering.

SPECIAL SUPPORTERS **特别支持单位**

嘉溢创投
FORTUNE+ VENTURES

嘉溢创投是一家聚焦数据智能全产业链的风险投资公司。嘉溢深度发掘“感知采集 - 数据传输 - 存储计算 - 显示交互”核心技术闭环，并持续关注相关技术在智能汽车、智慧交通和智能制造等垂直领域的产业落地机会。嘉溢创投致力于打造扎根数据智能产业、以发掘价值和创造价值为目标的解决方案型基金。

Fortune+ Ventures is a venture capital firm focusing on the whole industry chain of Data Intelligence. Fortune+ Ventures aims to dig deeper in the core-closed loop of “Perception & Acquisition - Data Transmission – Storage & Computing – Display & Interaction” and pay constant attention to these technologies’ industrialization in verticals such as intelligent car, intelligent transportation and intelligent manufacturing. Fortune+ Ventures commits itself to building a solution capital with the assumed mission of discovering as well as creating value by taking root in Data Intelligence industry.

同济
校友会
TONGJI UNIVERSITY
ALUMNI ASSOCIATION

同济校友产业创新联盟由同济大学校友总会与上海校友会共同发起成立，依托母校科研优势，整合校友企业产业资源，支持校友创新创业，推进学校科研成果产业化，致力于成为具有全球视野和一流影响力的产业整合创新平台。

Tongji Alumni Industry Innovation Alliance is jointly initiated by Tongji University Alumni Association and Shanghai Alumni Association. Relying on the scientific research advantages of Tongji, the alliance aims to integrate industrial resources of alumni enterprises, support alumni in innovation and entrepreneurship and promote the industrialization of scientific research achievements. The Alliance dedicates itself to becoming an industrial integration and innovation platform with global vision and first-class influence.

FRIEND OF INDUSTRY 行业合作伙伴

DEKRA
On the safe side.

5 月 21 日 · May 21

09:30
欢迎致辞 Welcome Speech

09:45
主旨演讲 Keynote

11:45 午餐 Lunch

大宴会厅 1 · 新能源汽车 BALLROOM 1 · NEW ENERGY VEHICLE	大宴会厅 2 · 智能网联汽车 BALLROOM 2 · INTELLIGENT CONNECTED VEHICLE
13:00 **整车研发 Vehicle Research and Development**	13:00 **市场前瞻 Market Overview** 13:30 **芯 - 路 - 云** **Connecting The Vehicle and Infrastructure**
14:30 茶歇 Tea Break	
15:00 **燃料电池汽车 Fuel Cell Vehicles**	15:00 **芯 - 路 - 云** **Connecting The Vehicle and Infrastructure**

5 月 22 日 · May 22

09:30 **主旨演讲 Keynote**	09:30 **主旨演讲 Keynote**
10:00 **电池技术与发展** **Battery Technology and Development**	10:00 **智能网联汽车技术** **Intelligent Connected Vehicle Technology**
10:30 茶歇 Tea Break	
11:00 **电池技术与发展** **Battery Technology and Development**	11:00 **智能网联汽车技术** **Intelligent Connected Vehicle Technology**
12:30 午餐 Lunch	
13:30 **电机与驱动系统 Electric Motors and Drive Systems**	13:30 **高精地图测绘 HD Mapping**
14:30 茶歇 Tea Break	
15:30 **论文宣讲 Technical Papers**	15:30 **验证和测试 Validation and Testing**

本论坛旨在为思想的交流提供一个开放的平台。参会者或听众的发言未经本人及其公司的许可不得引用或剽窃。未经本人及其公司的许可，发言、讨论或照片的任何记录都不得擅自使用。

图像的使用规则

请注意，以SAE International活动与参与者的名义所拍摄的照片与视频的版权属于SAE International。只要注册参加SAE International的活动，即视为同意SAE International可在不通知您或对您提供报酬的情况下，为了宣传等目的使用任何有您出现在内的照片或视频。

Sessions are public forums that provide an open exchange of ideas. Any recording of remarks or presentations are highly discouraged. Please seek speaker's permission beforehand.

CONSENT TO USE OF IMAGES

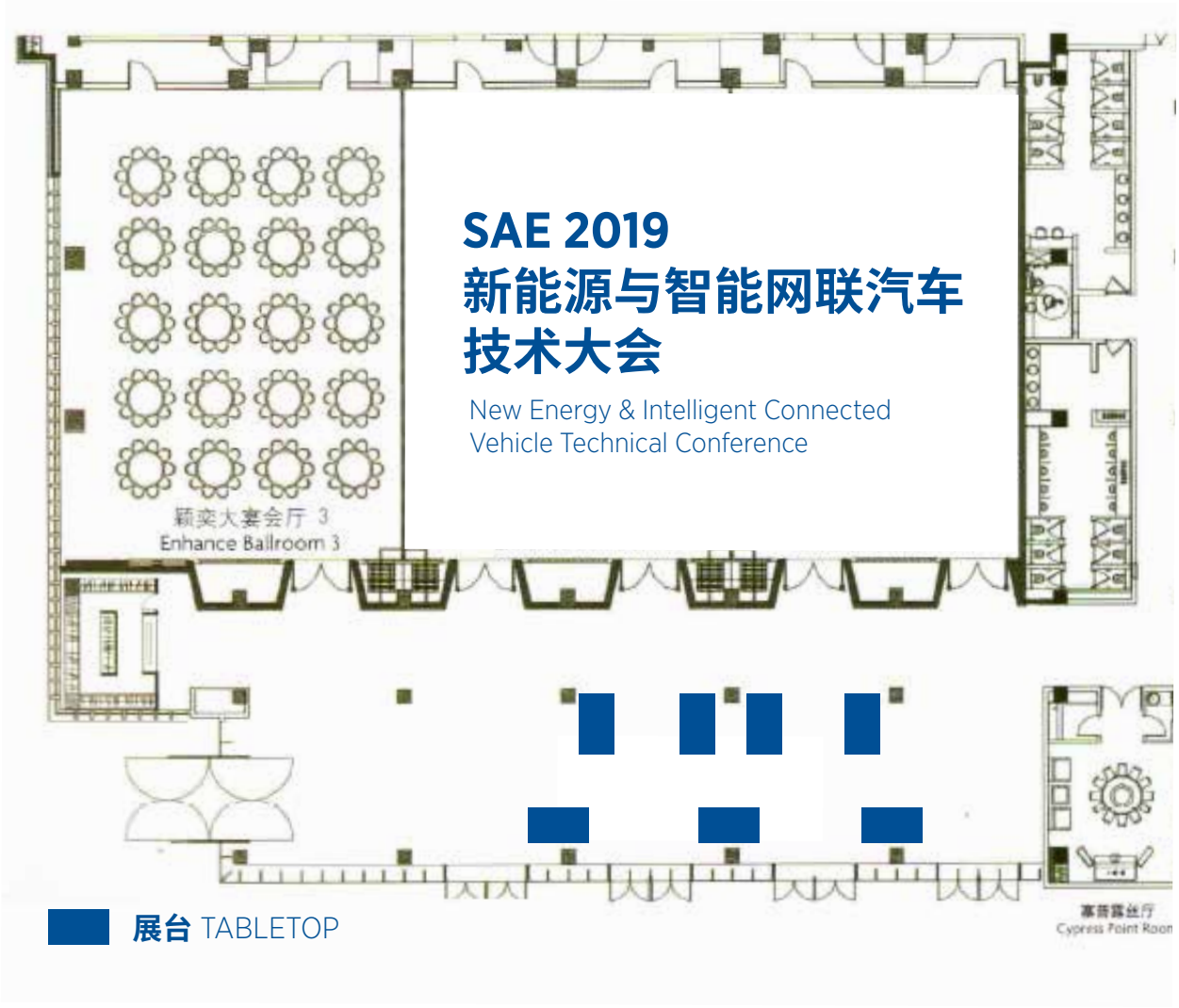
Please note that photographs and video taken by or on behalf of SAE International of event activities and attendees shall be the property of SAE International. By registering for an SAE International event, you consent to the use by SAE International of any photograph or video in which you appear, including for promotional purposes, in print, digital, or other format, without notice or compensation to you.

上海颖奕皇冠假日酒店 B1 楼大宴会厅 1、2

Enhance Ballroom 1&2, B1 - Crowne Plaza Shanghai Anting Golf

地址：上海市嘉定区安亭镇博园路 6555 号

Address: No.6555 BoYuan Road, JiaDing District, Shanghai, China



STAFF TEAM 项目团队

Sherry McCaskey
Event Manager
Sherry.Mccaskey@sae.org

Frank Bokulich
Content Developer Manager-Events
Frank.Bokulich@sae.org

Rich Polinski
Content Developer Specialist
Richard.Polinski@sae.org

Kristie Saber
Content Administrator
Kristie.Saber@sae.org

Alan AO
Manager, Events & Aerospace Standards, China
Alan.Ao@sae.org

Will CHANG
Marketing Manager, China
Will.Chang@sae.org

Rick WANG
Project Manager, China
Rick.Wang@sae.org

Jay JIANG
Program Developer, China
Jay.Jiang@sae.org

MAY 21

9:30 **Welcome Speech**
Billy XU SAE International

KEYNOTE

9:45 **Volvo Cars Electrification - Focusing on Attributes and Connectivity**
Niclas Bratt Volvo Cars China R&D

ABSTRACT

Since more than 40 years, electrification has been on the car manufacturers' observation list. Improvements in battery technologies are closing up to mature performance and cost levels. Viable vehicles with electric propulsion are entering key markets on a broader scale. Several official statements have been launched by Volvo Cars with emphasis on a high importance of electrification. Transitioning to electrification will provide the customers with vehicle attributes varying from a conventional powertrain. This presentation will provide a general comparison of different key attributes between the different degrees of electrification. It as well includes the challenges with electrification where charging will be elaborated in more detail.

10:45 **Cybersecurity Coming of Age**
Miguel Bañón DEKRA

ABSTRACT

It's no news that connected and automated vehicles, mobility ecosystems and ITS are struggling to get cybersecurity right. Getting the right response from the market will be heavily influenced by the confidence that the new technology offering will be able to provide.

Gone are the days of impressing the media with hacking proofs, we're all in the same page of improving the cybersecurity engineering capabilities of the industry, and so are legislators and standard development organizations that have started to draft the short and medium landscape of regulation and standards to produce and prove the cybersecurity levels that are needed.

This presentation will elaborate on this landscape, and how all layers and stakeholders of the industry can start transitioning to the new requirements.

11:45 Lunch

BALLROOM 1
NEW ENERGY VEHICLE

13:00 **VEHICLE RESEARCH AND DEVELOPMENT**

Technical Roadmap of ICV and Leading Product Development and Industrialization
Dr. Yifan TANG SERES

ABSTRACT

The application of new technologies can accelerate the acceptance and popularization of smart electric vehicles. The presentation proposes a series of technical solutions and realization approaches for some common issues of most concern, such as range worries, charging difficulties, purchasing costs and driving pleasure. As for the realization of autonomous driving and intelligent connectivity, the presentation also suggests some development directions and practices from perspectives of OEM mass production and cutting-edge technology R&D.

BALLROOM 2
INTELLIGENT CONNECTED VEHICLE

13:00 **MARKET OVERVIEW**

The Evolution of Safety to Autonomy
Roger Lanctot Strategy Analytics

ABSTRACT

The automotive industry is being transformed by the evolution and integration of safety systems that is setting the stage for autonomy. The presentation will consider the architectural hardware, software and connectivity implications behind this process and identify market opportunities for car companies and their suppliers.

5 月 21 日

9:30 **欢迎致辞**

徐秉良 SAE International

主旨演讲

9:45 **沃尔沃汽车电气化 - 专注于重要功能与网联性能**

Niclas Bratt 沃尔沃汽车中国研发中心

摘要

40 多年来，电气化这一命题对于汽车制造商而言一直处于有待观察的状态。而今，电池技术的发展推动产业日益向成熟的性能和成本水平趋近。采用电力推进的车辆已经更广泛地进入了关键市场。沃尔沃汽车发布的几项官方声明中均着重强调了电气化的重要性。电气化这一转变会为客户带来同传统的动力总成不一样的车辆属性。本次演讲会对不同程度电气化的关键属性进行综合比较，讨论电气化带来的挑战，其中也将详细探讨充电相关的问题。

10:45 **开启网络安全新纪元**

Miguel Bañón DEKRA

摘要

随着汽车行业的网联化和智能化的发展，联网汽车、自动化汽车、移动生态系统和 ITS 正在努力确保网络安全，这已经不是什么新闻了。新技术的迅速发展和安全性的提升很大程度的拉动了市场的积极反馈。

系统入侵、黑客等日渐为人们所熟悉。为了更好的提升网络安全，我们致力于改善网络安全设计能力，立法者和标准开发组织着手起草法规和标准，规范短期和中长期行业所需要的网络安全标准。

本此演讲将详细说明这些场景，以及行业的所有利益相关者如何开始向新需求过渡。

11:45 午餐

大宴会厅 1

新能源汽车

整车研发

13:00 **智能电动汽车技术路线和领先产品开发和产业化**

唐一帆 博士 SERES

摘要

新技术的应用可以加快智能电动汽车的推广和普及。发言围绕如何解决用户对于电动汽车比较关心的一些共性问题，如里程忧虑，充电困难，购车成本，驾驶乐趣等，提出了一系列技术方案并介绍实施路径。对于如何推动自动驾驶和智能网联的实现，从量产整车厂和前沿技术研发的双重角度，发言也提出了一些发展方向和实践。

大宴会厅 2

智能网联汽车

市场前瞻

13:00 **从安全到自主的演变**

Roger Lanctot Strategy Analytics

摘要

安全系统的发展和集成为自动化奠定了基础，也为汽车行业带来变革。本此演讲主要讨论在该变革中架构硬件、软件和网联技术的发展，并帮助汽车公司及其供应商识别市场机遇。

13:30

Electric Motor Design According to The Passenger Car Requirement

Dr. Jian ZHANG
Beijing Electric Vehicle Co., LTD.

ABSTRACT

Electric motor design based on application demands of passenger vehicles

- Common electric motor types and topology modes
- Typical working conditions of passenger vehicle's electric motor
- Demand-based motor design and long-term outlook

14:00

Bring Breakthrough Electric Vehicle Innovations to Market Faster

Huapeng ZHU Keysight

ABSTRACT

The automotive industry is accelerating its electronic technology revolution and fusing with the clean energy ecosystem, e-mobility is one of the hottest buzzwords today.

To expand the market of Electric Vehicles, we need Better battery performance, availability of efficient charging stations, and better power conversion across the entire e-mobility ecosystem. Keysight empowers automotive industry designers and manufacturers with the latest innovations in design and test solutions to help create high-quality and high-performance products while mitigating safety risks. Today we would like to talk about, advancement in battery technology, the rapid development of new electric and hybrid electric vehicles, and Keysight total solutions for E-Mobility.

14:30 Tea Break

15:00

FUEL CELL VEHICLES

The Critical Technologies of Centrifugal Air Compressor and Its Application in Fuel Cell Motors

Dr. Qingsong HUA Wenli Technology

ABSTRACT

This report summarized the current development of FCV both in China and abroad, put forward requirements for selecting air compressor, a peripheral core component for FCV engine, and provided Wenli Technology's solution for FCV air compressor.

13:30

CONNECTING THE VEHICLE AND INFRASTRUCTURE

AI in Autonomous Driving

Li ZHU Nvidia

ABSTRACT

- The value of autonomous driving
- Nvidia global partners
- Nvidia drive AI platform
- Car computer and GPU advantage
- Perception and simulation validation

13:55

Infineon Sensor Fusion Solutions

Kevin WU Infineon

14:20

The Backbone of Autonomous Driving - Smart Vehicle Architecture

Johnny NI Aptiv

ABSTRACT

SVA is a Level 3-5 sustainable reference architecture with a Unified PowerData Backbone, a Central Compute Cluster and Vehicle Zone Management which architecture to enable OEMs to accelerate current feature and function growth and deliver affordable fail operation for L3-L5 vehicles period.

15:00

Future Roads under The Perspective of Technological Innovation

Yuchuan DU Tongji University

ABSTRACT

Interactions between highways and automobiles are discussed with the view of technological development. Coupling development patterns and technical framework system of autonomous driving and intelligent high-speed are explored with the consideration of project practice in Shanghai.

13:30	**基于乘用车应用需求的电机设计** **张 健 博士** 北京新能源汽车股份有限公司 **摘要** 基于乘用车应用需求的电机设计 • 常用的电机类型及常见拓扑型式 • 乘用车驱动电机典型工况谱 • 基于需求的电机设计及远期展望	13:30	**芯 - 路 - 云** **人工智能在自动驾驶领域的运用** **朱 力** 英伟达 **摘要** • 自动驾驶的价值 • 英伟达的自动驾驶生态系统 • 英伟达自动驾驶车端和云端平台 • 车载计算平台 • 感知网络和仿真验证
14:00	**加速电动汽车突破创新推向市场** **朱华朋** 是德科技 **摘要** 汽车行业正在加速其电子技术革命，与清洁能源生态系统融合在一起，e-mobility 是当今最热门的流行语之一。 为了扩大电动汽车的市场，我们需要更好的电池性能，更高效的充电站以及整个电动汽车系统更高效的电能转换。是德科技为汽车行业的设计师和制造商提供最新的设计和测试解决方案，帮助他们创造高质量和高性能的产品，同时降低安全风险。今天，我们主要讲电池技术的进步，新型电动和混合动力汽车的快速发展，以及是德科技针对电动汽车的全面测试方案。	13:55	**英飞凌的传感器融合解决方案** **Kevin WU** 英飞凌科技（中国）有限公司
		14:20	**自动驾驶的主干网 - 智能汽车结构** **倪志刚** 安波福（中国）科技研发有限公司 **摘要** SVA 是一个自动驾驶级别 3-5 级的可持续参考体系架构，具有一个统一 PowerData 主干、一个中央计算集群和车辆区域管理系统，可帮助整车厂加速现有功能的开发并实现功能增长，并为 L3-L5 自动驾驶汽车提供经济适用的故障操作。
14:30	茶歇		
15:00	**燃料电池汽车** **离心式空压机关键技术及其在燃料电池发动机中的应用** **华青松 博士** 北京稳力科技有限公司 **摘要** 主要介绍了燃料电池汽车国内外发展现状，提出燃料电池发动机外围核心部件空压机的选型要求和面临的技术瓶颈，给出了稳力科技在燃料电池汽车用空气压缩系统方面的解决方案。	15:00	**技术创新视角下的未来公路** **杜豫川** 同济大学 **摘要** 从公路和汽车的技术发展历程角度审视其相互作用关系，探讨自动驾驶与智慧高速的耦合发展形态和技术框架体系，并介绍上海的工程实践考虑。

15:30

Development of Fuel Cell Industry: Standardization and Informatization

Chenyu LU
China National Fuel Cell Standardization Committee

ABSTRACT

As hydrogen battery and fuel cell will soon be industrialized, it's imperative to build an industry-guiding standard system, study and make standards for key technologies which can support commercial development of a company, and develop third-party testing and certification services. For fuel cell companies, product/service lifecycle management is the fundamental process of developing new products as well as continuous accumulation, improvement and innovation. Configuration management is the principle and basis of establishing product lifecycle management, based on which fuel cell companies should develop PLM-focused R&D and management platform.

16:00

Effects of Temperature on the Performance of Hybrid Fuel Cell Vehicles: A Review

Yue PAN Tongji University

ABSTRACT

Hybrid fuel cell vehicles (HFCVs) powered by fuel cell and lithium-ion battery have become a preferred direction of researchers in recent years. Good temperature control and energy management are important conditions for continuous and stable power output in the fuel cell hybrid power system. In this paper, temperature effects on the performance of lithium-ion battery, PEMFC are summarized and the thermal management and energy management of HFCVs are analyzed. Based on the analysis, the future research direction of developing integrated energy management strategy combining energy management and thermal management is proposed for HFCVs.

15:25

Practice Sharing of 5G Vehicle-Road Collaborative Application

Triumph Ren CMIM Network Co.,Ltd.

ABSTRACT

Combination of 5G and smart road provides intelligent support for autonomous vehicles. China Mobile's spin-off CM Intelligent Mobility is established to provide 5G smart transportation products and services. How to leverage 5G to develop smart road, increase traffic efficiency and improve driving safety? To do so, China Mobile released 5G edge computing-based "5D Time-space" platform which supports vehicle-road synergy. China Mobile has worked with Qilu Expressway, government of Fangshan, Beijing and Da'An Automobile Testing Center to successfully implement the platform in smart transportation. We hope to extend our cooperation with more governments, companies and parks to promote the adoption of this technology and improve transport experience in urban and park areas.

15:50

Cloud Native Practice in the Digital Automotive Industry

Golfen GUO DaoCloud

ABSTRACT

Experienced in the mechanical 1.0 era and the Electronic 2.0 era, the automotive industry is also rapidly entering the digital 3.0 era. These new digital business also raise higher requirements on IT infrastructure. During the presentation, Golfen will explain how the cloud-native technology helps and go through real customer cases.

16:15

PANEL "Chip-Road-Cloud" How to Realize CVIS

In the development of autonomous vehicles, the automotive industry worldwide tended to follow the path of developing vehicle-only intelligence by improving vehicle awareness, decision-making and control technologies. However as more and more limitations of vehicle-only intelligence in corner cases and cost control become noticed, Cooperative Vehicle Infrastructure System (CVIS) caught an industry-wide attention. Will the future technology path of AV continue to be vehicle-only intelligence focused? Is CVIS a feasible approach to realize autonomous vehicle? What roles will chip, vehicle, road and cloud play in the CVIS chain? What will its business mode look like? How can different stakeholders realize their values? When will be the key moments of CIVS evolution? Key stakeholders in the industry chain are invited to talk about this issue and seek a viable road to the realization of autonomous vehicles and closed loop industry from a wider perspective!

Moderator

Lei SHENG Partner, Fortune+ Ventures

15:30

燃料电池产业发展——标准化与信息化

卢琛钰 全国燃料电池标准化技术委员会

摘要

氢能和燃料电池即将进入真正的产业化时代，如何建立引领行业发展的标准体系，研究和制定能够支撑企业市场化发展的关键技术标准，从而推动第三方的检测和认证服务显得尤为重要。产品与服务的全生命周期管理，是企业新产品开发的流程基础，也是企业持续积累、持续改进、持续创新的前提和基础。构型管理是建立产品全生命周期管理的原理和基础，燃料电池企业当前需要在建立构型管理体系的基础上，建设以 PLM 为核心的研发管理信息化平台。

16:00

温度对于燃料电池混合动力汽车的影响

潘 越 同济大学

摘要

混合动力燃料电池车（HFCV，结合燃料电池和锂离子电池）已成为近年来研究的热门方向。出色的温度控制和能源管理是 HFCV 动力系统持续产生稳定功率的重要条件。本论文将探讨温度对锂离子电池性能的影响，总结 PEMFC 的相关问题，并分析 HFCV 的热管理和能源管理。根据分析，本文提议 HFCV 能源管理策略的未来研究方向应为能源管理与热管理相结合。

15:25

5G 车路协同应用实践分享

任大凯 中移智行网络科技有限公司

摘要

5G 与智慧道路天然融合，为自动驾驶汽车提供了智慧的路。中国移动成立子公司中移智行，提供 5G 智慧交通产品和服务。如何利用 5G 构建智慧道路，如何利用 5G 提升道路通行效率，如何利用 5G 提升驾驶安全？中国移动推出了基于 5G 边缘计算的“五维时空”平台，实现车路协同。中国移动已与齐鲁高速、北京房山、达安汽车检测中心等伙伴合作，成功将五维时空平台应用在智慧交通领域，并希望与更多的政府、企业、园区合作，共同推动 5G 智慧交通应用，提升城市及园区的交通体验。

15:50

汽车行业数字化转型中的云原生实践

郭 峰 道客网络科技有限公司

摘要

经历了机械 1.0 和电子化 2.0 时代，汽车工业正在快速地步入数字化 3.0 时代。而这个数字化的转型也不可避免对企业的 IT 支撑能力提出了新的要求。在本次分享中，郭峰将为大家介绍云原生技术是如何帮助企业实施数字化转型的，并会分享真实的客户案例。

16:15

专家座谈

“芯·路·云”——车路协同的产业落地途径

在自动驾驶产业落地过往的进程中，国内外产业界之前更多依托其在汽车感知、决策和控制方面的深厚技术积累，推动单车智能的发展。然而，随着人们越来越多地意识到单车智能在处理 Corner Case 和成本控制方面的局限，车路协同智能逐渐引起产业的广泛关注。自动驾驶未来的技术路径仍然会以单车智能为主吗？车路协同是不是自动驾驶走向落地的一条可行的途径？在车路协同的产业链中，芯片、汽车、道路和云平台不同各方将会扮演什么样的角色？在车路协同市场商业模式将会是什么样的，不同产业参与方如何实现价值变现？车路协同产业的演进路径上，关键的标志性时点何时到来？我们邀请产业链各环节的关键参与方，共同来探讨这个话题，试图从更广阔视角探求自动驾驶的演进方向和产业闭环！

主持人

盛 雷 嘉溢创投合伙人

MAY 22

	BATTERY TECHNOLOGY AND DEVELOPMENT	INTELLIGENT CONNECTED VEHICLE TECHNOLOGY
9:30	**Battery Technology and Development for Our Time** **Robert (Bob) L. Galyen** CATL **ABSTRACT** The rate of battery technology and development has accelerated for years. In this fast paced world of energy storage new ideas and approaches are plentiful but requires great scrutiny to avoid issues. If we follow the 5 Golden Rules of Safety, Performance, Life, Cost and Environment we cannot go wrong. But technology and development brings on new paradigms for engineers and consumers alike. The presentation will focus on the many faces of the aspects of technology and development cycles we face in "Our Time."	**C-V2X Technology Enabling ITS Service and Autonomous Driving** **Xiaofeng LÜ** Huawei Technologies Co., Ltd. **ABSTRACT** The value of C-V2X vehicle-infrastructure coordination system • The value of the V2X system for traffic management • V2X system to improve traffic efficiency and traffic safety • V2X system enables assisted driving and autonomous driving Progress of industrial ecology of vehicle road coordination system • Progress in the deployment of China urban roads and roads (the Internet of Vehicles pilot zone) • Progress in intelligent highways Huawei car road coordination system solution and progress introduction • Huawei's end-to-end road collaboration application solution
10:00	**The Application Trend of Thermal Interface Materials in EV Power System** **Michael CHENG** Henkel Electronics **ABSTRACT** Battery and other power modules will generate a lot of heat, which will damage battery's performance, stability and work life. Therefore, thermal management plays a crucial role in the whole design. This presentation introduces the design trends of EV battery and power system, meanwhile sharing several success application cases of thermal interface materials in mainstream EV battery manufacturers to inspire the engineers on how to select appropriate thermal materials and to optimize the thermal management system.	**From ADAS to AD – A Recipe for Designing and Proving Safe Autonomous Driving** **Rikard Uddström** Zenuity China **ABSTRACT** How do you design and prove that a self-driving vehicle is sufficiently safe? This session will focus on the key challenges of designing self-driving vehicles, and Zenuity will share insights and experiences including usage of deep learning, and development of decision-making algorithms.
10:30	Tea Break	

5 月 22 日

	电池技术与发展	智能网联汽车技术
9:30	**当今电池技术与开发** **Robert (Bob) L. Galyen** 宁德时代 **摘要** 多年来，电池技术与开发不断加速向前迈进。在快节奏的储能世界里，新想法和新方法层出不穷，需要保持审慎的态度才能避免隐患。只要我们遵守安全、性能、寿命、成本和环境的五大黄金法则，就不会出现问题。但是技术与开发为工程师和消费者等群体提出了新的范式。本次演讲将重点关注在“我们的时代”所面临的技术和开发周期这一命题上的各类情况。	**C-V2X 车路协同使能智慧交通和自动驾驶** **吕晓峰** 华为技术有限公司 **摘要** C-V2X 车路协同系统的价值 • 车路协同系统面向交通管理的价值 • 车路协同系统助力交通效率改善和交通安全提升 • 车路协同系统使能辅助驾驶和自动驾驶 车路协同系统产业生态进展 • 国内城市车路协同（车联网先导区）部署进展 • 高速公路智能化进展 华为车路协同系统解决方案及进展介绍 • 华为端到端车路协同应用解决方案
10:00	**电动汽车动力系统中的热界面材料的应用发展趋势** **程卫军** 汉高电子材料事业部 **摘要** 电池及动力模块会产生大量热能从而影响电池的性能、可靠性及寿命。因此，热管理在整个设计中扮演着越来越重要的角色。基于新能源汽车和动力系统的设计发展趋势，我们将和业内同行分享界面导热材料在新能源动力电池系统中的成功应用，从而启发工程师们选择合适的导热材料并优化热管理系统。	**从高级驾驶辅助系统 (ADAS) 通往自动驾驶 (AD) – 关于如何设计并证明自动驾驶安全性的秘方** **Rikard Uddström** Zenuity 中国 **摘要** 如何设计并证明自动驾驶的车辆是足够的安全呢？此话题着重于设计自动驾驶车辆的核心挑战，同时哲内提公司 (Zenuity) 将会分享对于深度学习用法以及决策算法开发相关的见解和经验。
10:30	茶歇	

11:00	**Implementation of High-Performance Analog Technologies in BMS** **Cheng WANG** ADI **ABSTRACT** Battery technology is an important driving power of new energy vehicles. How to improve the measurement accuracy and battery life, increase their voyage range, reduce cost and ensure the safety is a challenge for the industry. ADI's high performance analog technology provides a solution for battery management system. This report will describe the technical challenges faced by battery management system design. In terms of system measurement accuracy, the source of error is introduced and analyzed, and the measurement error can be minimized by using special reference technology. By integrating and optimizing external components, the overall cost can be reduced. The innovative "Reverse isoSPI" isolation communication technology guarantees simple and reliable system communication while giving flexibility. In terms of system security, a comprehensive security detection mechanism ensures the safe operation of battery management system. Based on the latest generation of Li-ion battery BMS solutions, ADI's high performance analog technology provides high-precision monitoring function, which can maintain good performance in harsh environments, provide reliable and safe power management, and effectively reduce the overall cost of the system.	**Development of ICV in The Industry Revolution** **Dr. Ying ZHANG** GWM HAVAL R&D Center **ABSTRACT** As technology revolution brings us with the combination of communication, Internet, artificial intelligence and vehicles, new applications of AV and V2X technologies have brought radical changes to mobility. As a leading domestic OEM, Great Wall Automobile tries to gripping opportunities to find his own way in this challenging wave of revolution.
11:30	**PANEL** **Battery Technology and Development** Moderator **Robert (Bob) L. Galyen** CATL Panelists **Jeff Yambrick** Great Wall Motors **Edward Wagner** Guangxi Liugong Machinery Co.	**Value of Intelligent Cockpit System** **Judy ZHANG** Pan Asia Technical Automotive Center **ABSTRACT** We shoul explore the value of intelligent cockpit from various angles, and select the appropriate combination of technical functions. Intelligence is not used to show off, but to provide cars and drivers with practical and reliable services.
12:00		**The Role of Basic Software Technology in Automatic Driving Safety** **William DONG** BlackBerry QNX, Greater China **ABSTRACT** Share the trend of autonomous driving industry, combined with expertise and characteristics of BlackBerry, focusing on the topic of platform software technology in autonomous driving and ADAS, from function safety and cybersecurity perspectives, elaborate the importance of those two perspectives toward autonomous driving, and in the meanwhile introduce the BlackBerry QNX ADAS platform SW solution, which is based on BlackBerry QNX latest sensor Fusion frame, and give insights and invoke thinking about the SW development of autonomous driving, at last, give brief introduction of BlackBerry company value proposition in automotive electronic platform SW industry and the marketing information.
12:30	Lunch	

11:00

高性能模拟技术在锂电池管理系统中的应用

王 成 ADI

摘要

电池技术是新能源汽车的重要驱动力。如何改善电池的测量精度和使用寿命，增加电池的续航能力、降低成本，保证使用安全是全行业面临的挑战。ADI 的高性能混合模拟技术为电池管理系统提供解决方案。

这个报告将介绍电池管理系统在设计中所面临的技术挑战。从系统测量精度方面，对误差来源进行了介绍和分析，并利用特殊的参考基准技术实现测量误差的最小化。成本上通过对外围器件的集成和优化，达到降低的整体成本的目的。创新的 Reverse isoSPI 隔离通讯技术，在保证了简单可靠的系统通讯基础上，同时能够兼顾灵活性。在系统安全方面，全面的安全检测机制，为电池管理系统安全运行提供保证。

基于以上技术的最新一代锂电池 BMS 解决方案，ADI 的高性能模拟技术提供的电池管理方案，具备高精度监控功能，在严苛的环境下能够保持良好的性能，提供可靠、安全的电量管理，并能有效降低系统的整体成本。

产业变革下的智能网联汽车

张 瀛 博士 长城汽车技术中心

摘要

随着新技术革命浪潮的来袭，信息通信、互联网、人工智能等技术与汽车行业的逐步融合，带来了汽车行业的变革。自动驾驶、车联网、V2X 等新技术的应用，给人类出行方式带来了根本性的变化。长城汽车作为国内领先的自主整车企业，面对挑战，抢抓机遇，在汽车新四化的进程中，走出一条有自主特色的道路。

11:30

专家座谈

电池技术与发展

主持人

Robert (Bob) L. Galyen 宁德时代

嘉宾

Jeff Yambrick 长城汽车

Edward Wagner 广西柳工机械股份有限公司

智能座舱系统的价值回归

张健琼 泛亚汽车技术中心

摘要

从多个维度去探索汽车智能座舱的价值，去伪存真的选取适合的技术功能组合服务于智能座舱系统。智能不是炫技，而是真正实用可靠的为汽车和驾驶员服务。

12:00

基础软件技术在自动驾驶安全中的作用

董渊文 黑莓 QNX 公司大中华区

摘要

本次演讲就自动驾驶行业趋势进行分享，结合黑莓的特点与专长，聚焦于自动驾驶中的基础软件技术，从功能安全和网络信息安全两个角度，阐述其对自动驾驶的重要性，同时提出黑莓 QNX 对于自动驾驶方面的基础软件开发平台解决方案，包含黑莓最新的基于车载系统 QNX 的 senor fusion 传感器融合的框架，给自动驾驶软件开发提供启发与思考，再最后介绍一下黑莓公司在车载汽车电子基础软件行业内的地位与市场情况。

12:30

午餐

	ELECTRIC MOTORS AND DRIVE SYSTEMS	HD MAPPING
13:30	**Integrated Drive Module (iDM) for Next Generation Electric Propulsion** **Dr. Alexandra Nafari** BorgWarner **ABSTRACT** The electric drive system is at the heart of new energy vehicles and to achieve the next level of electric propulsion dedicated solutions are needed. The integrated Drive Module (iDM) from BorgWarner is a highly integrated three-in-one propulsion solution combining transmission, electric motor and inverter technologies. This technology allows electric vehicles to consume less energy allowing further optimization of the battery and longer driving range.	**Application of High-precision Map in Autonomous Driving** **Ke YANG** BrightMap Science and Technology Co., Ltd **ABSTRACT** • Introduction of High Precision Map • AVP introduction • Current Situation of AVP Development • Challenges of AVP Production • Jingzhong AVP Products • Prospect
14:00	**Development of Highly Integrated Transmission for Future Electric Vehicles** **Aaron XU** Graziano Fairfield E-Drive Systems (Changshu) Co., Ltd. **ABSTRACT** Developing a platform for different OEMs requires the understanding of customer's needs but also the capability to anticipate new demands. The proper flow has to be followed in order to address the customer expectation. Flexible Installation layout and transmission ratios also need to be taken into consideration. This report focus on the platform approach to satisfy different customer expectations.	**HD Map: Navigate Autonomous Driving to Success** **Dr. Zhen DAI** Holomatic **ABSTRACT** HD Map is important to autonomous driving in many ways, including localization, navigation, planning and control and the real-time data updates. Dr. Zhen Dai, the head of HD maps and simulator at HoloMatic, will explain how HD maps work in an autonomous driving system, and how in turn the application of autonomous driving helps to accelerate the commercialization of HD maps.
14:30	**On-board DV Support Capacitor Selection and Design Scheme** **Hongkai WANG** Shanghai EAGTOP Electronic Technology Co., Ltd **ABSTRACT** As Electric Vehicle market grows rapidly, OEMs and parts suppliers are challenged with new demands. Higher size and cost requirements are made for electronic control system, so the design of capacitor, a key part of EC, has become more important than ever. The key of improving its power density lies in the optimization of integration and reduction of high-frequency inductance.	**Weighted Distance Metrics for Data Association Problem in Multi-sensor Fusion** **Dr. Darui ZHANG** Dongfeng Motor Corporation Technical Center **ABSTRACT** Advanced Driver Assist Systems (ADAS) can reduce human error and improve the safety of road traffic. The ADAS often require information from multiple sensors. The task of assigning new observations to the existing tracks requires distance metrics to present the similarity between tracks. In the literature, metrics, such as standardized Euclidean distance and Mahalanobis distance has been used. Though accounting for the scale and correlation of the data, the existing metrics cannot account for the importance of each feature in predicting their dissimilarity. As a result, weighting factors are added to the distance metrics and they require extensive manual tuning. We propose a data-driven method to obtain the weighting factors automatically using supervised learning. The new distance metric was evaluated using real-world driving data. Comparing to the existing metrics, it achieves better performance in separating dissimilar tracks and higher matching accuracy.
15:00	Tea Break	

	电机与驱动系统	高精地图测绘
13:30	**下一代电力推进系统的整合驱动模块（iDM）** **Alexandra Nafari 博士** 博格华纳 **摘要** 电力驱动系统是新能源汽车的心脏，为了实现下一代电力驱动技术我们需要专门的解决方案。博格华纳的整合驱动模块（iDM）是一款将变速箱、电机和变频器高度整合的三合一推进解决方案。改技术可以帮助电动汽车减少能耗，优化电池，延长里程。	**高精地图在自动驾驶中的应用** **杨 柯** 上海晶众信息科技有限公司 **摘要** • 高精度地图介绍 • AVP 介绍 • AVP 发展现状 • AVP 量产面临的挑战 • 晶众的 AVP 产品 • 前景展望
14:00	**为未来的电动汽车开发高度集成的变速器** **许 刚** 古加诺新能源汽车（常熟）有限公司 **摘要** 为不同的整车厂开发平台不仅需要了解客户的需求，还需要具备预测新需求的能力。为了满足客户的期望，必须遵循适当的流程。还需要考虑安装布局的灵活性和传动比。本报告关注平台方法，以满足不同客户的期望。	**高精地图导航：通往自动驾驶的捷径** **戴 震 博士** 禾多科技 **摘要** 高精度地图对自动驾驶汽车定位、导航与控制，以及数据的实时更新，都起到至关重要的作用，是自动驾驶走进现实的关键一环。禾多科技地图及模拟器负责人戴震博士在报告中将解释高精度地图对于自动驾驶的必要性，并结合禾多科技的多传感器融合技术方案，深度解析如何把高精度地图应用于自动驾驶系统中，以及自动驾驶将怎样助力高精度地图实现商业化。
14:30	**车载直流支撑电容器选型设计方案** **王宏凯** 上海鹰峰电子科技股份有限公司 **摘要** 电动汽车市场高速发展，市场对整车及零部件厂商提出了新的要求，电控作为三电之一，厂商对其体积、成本有更高的要求，电控中电容器的设计显得尤其重要，如何提高集成度，降低高频电感，提高功率密度成为关键。	**多传感器融合数据关联中的加权距离参数** **张达睿 博士** 东风汽车集团有限公司技术中心 **摘要** 高级驾驶辅助系统（ADAS）可以减少人为错误并提高道路交通的安全性。 ADAS 通常需要将多传感器的信息进行融合。 将新的观察目标与已有轨迹进行匹配的任务需要距离参数来表示匹配的相似性。 文献中使用了诸如标准欧氏距离和马哈拉诺比斯距离等参数。 这些距离参数考虑了数据的数值分布和相关性，但无法解释不同特征在预测目标相似性方面的重要性。 为解决此问题，可在距离参数中添加加权因子，但确定加权因子的大小需要大量的人工调试。 为此我们提出了一种基于数据的监督学习方法自动获得加权因子。我们使用真实的驾驶数据对新的距离参数进行评估，并与现有参数进行比较。新的距离参数在区分不同轨道和提高匹配精度方面取得了更好的效果。
15:00	茶歇	

	TECHNICAL PAPERS	VALIDATION AND TESTING
15:30	**Study of Engine Start Vibration Index in a Hybrid Powertrain Using Torque Sensor and Cylinder Pressure Sensor** **Lei DU** Tsinghua University **ABSTRACT** This paper presents an investigation of drivability issue of engine start-stop. The first section introduces the powertrain to be studied. The second section introduces development of a specially designed torque sensor. The torque sensor is utilized to collect the instantaneous shaft torque on occasion of engine start. In the third section, this paper has performed two experiments. Firstly, a typical engine start process (from 0 to 650 rpm) is studied. Instantaneous shaft torque, encoder signal and cylinder pressure signals are gathered and synchronized. Then, this paper performed two experiments to examine the performance of vibration index. The results show the effectiveness of vibration index.	**Thoughts and Practices on ICV Security Testing** **Dr. Xiaoqing XUE** China Software Testing Center **ABSTRACT** This paper tries to discuss the information security risks faced by ICV and a vehicle's overall security system, proposes an idea of ICV security testing and evaluation system to effectively measure and verify the protection performance of ICV security system.
16:00	**Analysis of Active Collision Avoidance Performance Based on Cooperative Regenerative Auxiliary Braking System** **Xiaohui HOU** Tsinghua University **ABSTRACT** For purpose of analyzing the improvement of active collision avoidance performance after the introduction of regenerative braking, a new type of cooperative regenerative auxiliary braking system (CRABS) of intelligent electric vehicles is proposed, which integrates the functions of brake-by-wire, regenerative braking and active collision avoidance. According to the result of simulation and hardware-in-loop test, it shows that compared with the conventional hydraulic braking system, CRABS system proposed in this paper conducts faster in braking response and closer to the ideal braking distance, and the performance of active collision avoidance is improved.	**Advanced Testing Technologies for Autonomous Driving** **Andreas Gau** dSPACE **ABSTRACT** One of the fundamental challenges for Intelligent and Connected Vehicles is: How to reliably and cost-efficiently verify and validate your software and hardware stack for actual production deployment? The automotive industry already has established and proven processes and methods for validation and verification. However, software for ICVs radically differs from traditional embedded control functions. This talk shall help you optimize your individual ICV testing strategy. It will analyze the requirements on testing solutions, provide an insight in industry standard processes and possible adaptations for ICVs, and present new technologies for testing core functions of Autonomous Vehicles.

	论文宣讲	验证和测试
15:30	**采用转矩传感器和缸压传感器的混合动力总成发动机起动振动指标研究** **杜 磊** 清华大学 **摘要** 本论文展示了一项针对发动机启停驾驶性能问题的调查。第一部分介绍研究的动力总成。第二部分介绍一个特殊设计的扭矩传感器的开发。第三部分描述了两项实验。首先是对一个典型的发动机启动过程（从 0 到 650rpm）的研究。研究中收集并同步了瞬时轴扭矩、编码器信号和发动机气缸压力信号。之后，论文呈现了两个检测震动指数表现的实验。实验结果证实了震动指数的有效性。	**智能网联汽车信息安全测试思考与实践** **薛晓卿 博士** 中国软件评测中心 **摘要** 分析智能网联汽车面临的信息安全风险，研究智能网联汽车整车信息安全防护体系，提出智能网联汽车信息安全测评体系的思路，对智能网联汽车信息安全防护能力进行有效评价和验证。
16:00	**基于协同再生辅助制动的主动避碰性能分析** **侯晓慧** 清华大学 **摘要** 为分析引入电机回馈力矩后线控液压制动系统的主动避撞性能改善效果，以智能纯电动轿车为研究对象，将线控技术、回馈制动和主动避撞三方面功能有机结合，进行了能量回馈式线控制动系统的方案设计与分析。仿真和试验结果表明：引入回馈制动的线控液压制动系统相比纯液压制动，其制动响应更快，车间距离更接近理想值，主动避撞性能得到改善。	**自动驾驶高级测试技术** **Andreas Gau** dSPACE **摘要** 智能网联汽车的一项根本挑战在于，如何对你的软硬件堆进行可靠和成果效益高的确认和验证，以实现真正的生产应用？汽车行业已经建立并且证实了确认和验证的流程与方法。但是，ICV 软件和传统内嵌控制功能存在巨大不同。 本次演讲将帮你优化个人 ICV 测试策略。它可以分析测试方案要求，解读行业标准流程和可能用于 ICV 的适应调整，并展示自动驾驶汽车核心功能测试的全新技术。

	TECHNICAL PAPERS	VALIDATION AND TESTING
16:30	**Optimal Speed Profile for Minimum Vibaration During Engine Start Using Pontryagin's Minimum Principle Approach** **Lei DU** Tsinghua University **ABSTRACT** This paper focusses on an optimal control problem that tries to reduce vibration during engine start. In the first section, the target diesel powertrain is introduced. Its dynamic model is established using crank-link dynamics. Secondly, an index is brought out to evaluate the severity of vibration. The square of the angular acceleration is chosen as the index of vibration. Then, the author models this problem as a continuous-time optimal control problem with a fixed terminal time and a partially free terminal state, then solve it by the Pontryagin's minimum principle.	**Research on Testing and Evaluation Methods of Automotive Intelligence, Automation and Connectivity** **Yu WANG** China Automotive Technology&Research Center **ABSTRACT** Automobile intellectualization is a development from non-intelligent features to fully intelligent features, which demonstrates a dynamic evolution from non-intelligence to primary intelligence, then ultimately to advanced intelligence. Automobile automation is a process from non-autonomous driving features to complete autonomous driving features. Connectivity is an important technology assisting efficient and rapid operation of automobile through communication and network. Nowadays, connectivity has become a very extensive concept, but the essential definition of autonomous driving is also very confused with intelligent vehicle and connected vehicle. which makes it difficult to effectively promote technical development, business scenarios application, test and evaluation. Therefore, this research focuses on the above three different categories to refine the classification of other test evaluation methods, explores vehicle intelligent evaluation through Turing test, analyzes autonomous performance evaluation through scenarios, and concerts connectivity assessment through functional test. The target is building an effective evaluation system, boosting scientific and technological progress and industrial development.

	论文宣讲	验证和测试
16:30	**采用庞特利亚金最小原理对发动机起动时最小振动的最优速度剖面的研究** **杜 磊** 清华大学 **摘要** 本论文重点关注一项力图减少发动机启动期间的优化控制问题。第一部分介绍了目标柴油动力总成。它的动态模型是利用曲柄连杆动力建立起来的。第二部分采用一种指数评估震动的严重程度。选用角加速度平方作为震动指数。之后，作者将这一问题模拟为一个连续的时间优化控制问题，设置了特定终端时间下且部分自由的终端状态，之后利用庞特里亚金最小值原理进行解决。	**汽车智能化、自动化、网联化测试评价方法研究** **王 羽** 中国汽车技术研究中心 **摘要** 汽车智能化是一个汽车从无智能功能到实现全智能功能的一个发展过程，体现了汽车从无智能到初级智能，最后到高级智能的发展进程，是一个动态过程，最终实现的是智能体。汽车自动化是汽车从无自动驾驶功能到全自动驾驶功能的一个过程，其功能是一种车辆的能力体现。汽车网联化是借助通信、网络等方式辅助汽车高效、快速运行，是助力汽车智能化和自动化进程的重要手段。目前，智能网联成为一个十分泛的概念，而自动驾驶与智能汽车、智能网联汽车的本质定义也非常混淆，导致车辆的技术路线研究、商业场景应用、测试评价都难以有效推进。因此，针对以上三种不同的类别进行细化分类别的测试评价方法的研究，通过图灵测试探索汽车智能化测评，通过场景测试探索汽车自动化测评，通过功能测试探索汽车网联化测评，从而构建有效的测评体系，推动科技进步和产业发展。

徐秉良

SAE International
中国区总经理

Billy XU

General Manager, China
SAE International

Niclas Bratt

沃尔沃汽车中国研发中心
推进能源系统总监

Niclas Bratt 拥有英国莱斯特德蒙特福特大学机电一体化硕士学位。毕业后，他加入瑞典沃尔沃汽车公司研发部门，从事自动变速器领域的相关研究。在沃尔沃工作的几年里，他在动力系统开发的各个领域积累了丰富经验，担任过管理和项目领导职位。2012 年，他担任沃尔沃首个插电式混合动力汽车项目的动力总成项目经理。现任沃尔沃汽车中国研发中心推进能源系统总监。

Niclas Bratt

Director of Propulsion Energy Systems
Volvo Cars China R&D

Niclas Bratt has a Master of Science degree in Mechatronics from De Montfort University, Leicester England. After graduation he joined Volvo Car Corporation Research & Development in Sweden in the area of automatic transmissions. During his years within Volvo he has gained experience from wide range of areas within Powertrain development, both in managerial and program leading positions. Among these he was the Powertrain program manager for Volvo's first plug-in hybrid vehicle project, launched in 2012. His current position is Director of Propulsion Energy Systems, Volvo Cars China R&D.

Miguel Bañón

DEKRA
产品测试网络安全全球技术官

Miguel Bañón 先生是 DEKRA 产品测试网络安全全球技术官。

Miguel Bañón 先生在网络安全领域拥有近 30 年的经验，他于 2017 年加入 DEKRA，支持 DEKRA 进一步拓展产品网络安全测试和评估业务。他为各国政府、安全评估实验室和产品开发提供咨询服务，并负责建立通用标准和 FIPS 140-2 实验室，现在已经是 DEKRA 的一部分。

Miguel Bañón 先生是 ISO/IEC JTC1/SC 27/WG“安全评估、测试和规范”和 CEN/CLC/JTC 013/WG 03“安全评价和评估”的召集人。他也是通用标准用户论坛管理委员会的成员。

Miguel Bañón

Global Technology Leader for Cybersecurity of DEKRA Product Testing Service Division
DEKRA

Mr. Miguel Bañón is the Global Technology Leader for Cybersecurity of DEKRA Product Testing Service Division.

Mr. Bañón has nearly 30 years of experience in the field of Cybersecurity and joined DEKRA in 2017 as part of the company global investments in product cybersecurity testing and evaluation. He has provided consultancy services to governments, security evaluation laboratories and product developers, as well as being responsible for the setting up of a successful Common Criteria and FIPS 140-2 laboratory, now part of DEKRA.

Mr. Bañón is the Convenor of ISO/IEC JTC1/SC 27/WG, "Security evaluation, testing and specification", and of CEN/CLC/JTC 013/WG 03 "Security evaluation and assessment", where fundamental standards are developed. He is also a member of the Common Criteria User Forum Management Board.

唐一帆 博士

SERES 首席技术官
三电智能研发中心总经理

唐一帆博士现任美国加州硅谷 SERES (原 SF Motors) 首席技术官和三电智能研发中心总经理，以及重庆小康工业集团 EV 首席科学家，负责三电系统、电池技术和智能电动汽车的开发。他于 1990 年获得清华大学硕士学位 , 1994 年获得美国俄亥俄州立大学博士学位。从 2007 年至 2017, 他先后任职于 Tesla，Lucid Motors 和 Facebook，担任电驱动领域技术负责人。

Dr. Yifan TANG

CTO of SERES
General Manager of R&D Center for e-Powertrain

Dr. Yifan Tang is CTO of SERES (former SF Motors, situated in Silicon Valley) and General Manager of R&D Center for e-Powertrain, Intelligent Driving and Battery Technology. He is also Chief Scientist at Sokon Group in charge of the development of battery, motor and electric control system, battery technology and intelligent vehicles. He graduated from Tsinghua University in 1990 with a master degree and Ohio State University in 1994 with Ph.D. He worked in Tesla, Lucid Motors and Facebook from 2007 to 2017 as technical head of electric driving.

Roger Lanctot

Strategy Analytics
全球汽车业务部汽车互联交通总监

Roger Lanctot 拥有超过 25 年的记者、分析师和顾问从业经验，他曾为电子公司、汽车公司、无线运营商、一级供应商和开发人员提供产品和市场开发及战略方面的咨询。过去 10 年间就职于战略分析公司（Strategy Analytics），现任全球汽车业务部汽车互联交通总监。他毕业于达特茅斯学院，是知名的博客作者和会议演讲嘉宾。Roger 是 TU 汽车名人堂的成员之一，并被选为 2017 年科技汽车最佳分析师或互联汽车名人（Tech Cars Best Analyst or Connected Car Celebrity）。他还是在 AutomobilityLA 大会和国际电信联盟在日内瓦车展上举办的“未来网联汽车”活动中担任顾问委员。

Roger Lanctot

Director, Automotive Connected Mobility, Global Automotive Practice
Strategy Analytics

Roger Lanctot has 25+ years of experience as a journalist, analyst and consultant advising electronics companies, car companies, wireless carriers, Tier 1s and developers on product and market development and strategy. He is currently Director, Automotive Connected Mobility, in the Global Automotive Practice at Strategy Analytics, where he has worked for the past 10 years. He is a graduate of Dartmouth College and a frequent blogger and keynote speaker. Roger is a member of the TU-Automotive Hall of Fame and was selected as the 2017 Tech Cars Best Analyst or Connected Car Celebrity. He is on the advisory board of AutomobilityLA and the Future Networked Car event put on by the International Telecommunications Union at the Geneva Motor Show.

张 健 博士

北京新能源汽车股份有限公司
电机开发高级经理

张健，工学博士，从事电机设计理论研究及工业应用总计十余年。2012 年毕业于华北电力大学获博士学位。后在英国谢菲尔德大学从事博士后研究，主攻电动汽车用驱动电机设计。

2015 年加入北汽新能源，与团队成本一起进行了北汽新源能的自主化研发，目前已经成功研发了两个平台，其中一个平台两款电机应用于 5 种车型，随着车型量产。截止到 2019 年 4 月底，共计生产 8 万余台。

Dr. Jian ZHANG

Senior Manager, Design of EV Driving Motor
Beijing Electric Vehicle Co., LTD.

Zhang Jian is a Doctor of Engineering dedicated to theoretical study and industrial application of electric motor for a decade. Zhang graduated from North China Electric Power University as D.E. in 2012 followed by post-doctoral research on the design of EV driving motor in the University of Sheffield.

Upon joining BJEV in 2015, Zhang embarked on the company's independent development of NEV motor with his team. Two platforms have been successfully developed, one of which contains 2 electric motors applicable to 5 models scheduled for mass production together with their supporting models. Over 80,000 units have been produced by the end of April 2019.

朱 力

英伟达
自动驾驶业务高级经理

朱力，车辆工程专业汽车电子研究方向硕士，英伟达自动驾驶业务高级经理，负责车载计算平台在各大主机厂的业务开拓和管理。加盟英伟达之前，在苏州博世工作 8 年，负责业务开拓和项目管理，带领团队负责自动驾驶系统、主动安全系统、制动系统和被动安全系统的系统整合方案在各大主机厂的运用。

Li ZHU

Senior Manager of Nvidia Autonomous Driving Business
Nvidia

Mr. Zhu Li, master degree of vehicle engineering, research field is Automotive electronics. Mr. Zhu Li is senior manager of Nvidia autonomous driving business, take responsible for car computer and powerful SoC business in top OEMs. Before join Nvidia, Mr. Zhu Li worked for global tier1 Bosch for 8 years, and take the sales team to award and launch the system solution in top OEMs, which include autonomous driving system, active safety system, braking system and passive system.

朱华朋

是德科技（中国）有限公司
汽车与能源事业部业务拓展经理

朱华朋，2015 年加入是德科技，现任汽车与能源事业部业务拓展经理，主要负责大中华区汽车与能源测试测量解决方案的业务拓展和技术支持。有超过十年的电源行业从业经验，曾任飞利浦全球研发中心特种照明部门技术负责人，带领团队设计开发多个创新型特种照明平台，同时负责研发与工厂测试流程设计，熟悉电源类及其他电子产品的研发和生产测试流程。

Huapeng ZHU

Business Development Manager of Automotive and Energy Solution Group
Keysight

Zhu Joined Keysight in 2015 as business development manager of Automotive and Energy Solution Group, mainly responsible for business development and technical support on automotive and energy test and measurement solutions in Greater China. Have more than ten years experience in power industry, was the technical leader of the special lighting department in Philips global R&D center before, led the team to design and develop a number of innovative special lighting platforms, responsible for test process design of R&D and factory, and experienced with test process of power supply and other electronic products.

Kevin WU

英飞凌科技（中国）有限公司
Infineon

倪志刚

APTIV 安波福（中国）科技研发有限公司
业务单元总监

在过去 15 年间，Johnny 在德尔福 /APTIV 公司电子和电气领域担任了多项业务和产品管理职务。2017 年，Johnny 从 Packard 调到 AS&UX 部门，担任亚太地区汽车网联与信息安全事业部主管，负责领导该部门的商业和产品开发活动，专攻车载网络以及无线连接。

Johnny NI

Business Unit Director
APTIV

In the past 15 years, Johnny has held various business & product management roles in both Delphi/APTIV electronics and electrics area, most recently in 2017 Johnny transferred from Packard into AS&UX division as business unit director of Connectivity & Security in AP, he leads the BU's commercial and product development activities, focusing on in-vehicle networks as well as wireless connectivity.

华青松 博士

稳力科技
执行董事

华青松，稳力科技执行董事、教授、博导；超高速电机领域国际知名专家；2006 毕业于德国克劳斯塔尔工业大学，获工学博士学位；曾任采埃孚集团研发经理、BOSCH 集团新能源研发副总裁；广东省人民政府新能源汽车战略咨询专家，德国工程师协会汉堡及北德地区主任委员；德国标准化委员会委员； 近五年发表 SCI 论文 30 余篇，获批专利 60 余项；获省部级奖励一等奖 2 项。

Dr. Qingsong HUA

Executive Director
Wenli Technology

Hua Qingsong is Executive Director of Wenli Technology, professor and tutor of Ph.D. student, and internationally reputed expert on ultrahigh speed motor. He graduated from TU Clausthal with Ph.D. in 2006. He was R&D manager at ZF Group and Vice President of NEV R&D at BOSCH. He is Advising Expert on NEV strategy for Guangdong government and Chairman of Committee, Hamburg and North Germany, at Verein Deutscher Ingenieur. He is also member of German Institute for Standardization. He published over 30 SCI papers in the last five years and owns over 60 approved patents. He also won 2 first prizes of provincial awards.

杜豫川

同济大学
交通工程学院 副院长

杜豫川教授多年致力于城市交通信息化管控的应用基础和工程技术研究，在交通系统多源信息获取、交通运行管理和网络诱导技术等方面取得一系列原创性成果，并在上海世博会、虹桥综合交通枢纽、迪士尼度假区等重大工程中得到推广应用；在智慧交通基础设施方面的研发成果得到了行业领军企业的产业孵化。

Yuchuan DU

Vice Dean, College of Transportation Engineering
Tongji University

Professor Du is committed to technology research and application of urban traffic information management and control for many years, and has accumulated a series of original achievements in the multi-source information acquisition in transportation system, traffic operation management and network guidance technology, which has been promoted and applied in major projects such as Shanghai Expo 2010, Hongqiao Hub and Disney resorts. Research achievements in intelligent transportation infrastructure have attracted professional incubation from industry pioneers.

卢琛钰

全国燃料电池及液流电池标委会副秘书长
中国能源研究会燃料电池专委会副秘书长
上海电器科学研究院院长助理兼北京分院院长

卢琛钰，教授级高级工程师，上海电器科学研究院院长助理兼北京分院院长，长期从事电工电器行业发展和标准化研究与管理，现致力于燃料电池等新兴产业标准化和企业研发管理的信息一体化服务，现任全国燃料电池及液流电池标委会副秘书长，中国能源研究会燃料电池专委会副秘书长。

Chenyu LU

Deputy Secretary General of National Technical Committee 342 on Fuel Cell and Flow Battery Standardization Administration of China

Deputy Secretary General of Fuel Cell Committee, CERS
Associate President of Shanghai Electrical Apparatus Research Institute and President of Beijing Branch

Lu Chenyu, Professor & Senior Engineer, is Associate President of Shanghai Electrical Apparatus Research Institute and President of Beijing branch. He has been devoted to the development of electrical engineering and electric apparatus industry as well as research on standardization and management. Currently, he is dedicated to the integration service of standardization and corporate R&D/management in new emerging industries such as fuel cell. He is Deputy Secretary General of National Technical Committee 342 on Fuel Cell and Flow Battery Standardization Administration of China and Deputy Secretary General of Fuel Cell Committee, CERS.

任大凯

中移智行网络科技有限公司
创新孵化部总经理

任大凯，5G 自动驾驶专家，5G 自动驾驶联盟执行秘书长，中国公路学会自动驾驶工作委员会常务委员。

Triumph Ren

General Manager of Innovation Department
CMIM Network Co.,Ltd.

Ren, 5G Automated Driving specialist, Executive Secretary of 5G Automated Driving Alliance, Member of the Standing Committee for Working Committee on Automated Driving of China Highway & Transportation Society.

潘 越

同济大学

潘越，是同济大学汽车学院的研究生。我课题的研究对象是燃料电池和锂离子超级电容器混合动力系统，具体研究内容为考虑温度约束的能量管理控制策略对于燃料电池混合动力汽车综合性能的影响。我感兴趣的内容为先进的智能控制技术和新能源汽车能量管理控制策略的优化方法。

Yue PAN

Tongji University

Yue Pan, from School of Automotive Studies, Tongji University. I am currently a graduate student. My research is about fuel cell and lithium-ion supercapacitor hybrid power system. Specific research focus is the influence of energy management strategies considering temperature factor on the comprehensive performance of hybrid fuel cell vehicles. The specific research contents that interest me are advanced intelligent control technologies and the optimization methods of new energy vehicles' energy management strategies.

郭 峰

道客网络科技有限公司
首席技术官、联合创始人

郭峰，曾就职于 EMC 中国研究院，担任云平台首席架构师、主任研究员，曾深度参与了 OpenStack、CloudFoundry 等云技术平台的研发与设计，对分布式系统、虚拟化和容器技术有深入研究。其于 2014 年创办了 DaoCloud，致力于通过云原生技术栈推动企业整体数字化转型，目前已为近百家大型企业提供了产品和服务。

Golfen GUO

CTO & Co-founder
DaoCloud

Before founding DaoCloud in 2014, Golfen worked as technologist in EMC Labs China for 8 years, participated projects relates to application architecture transformation, network virtualization, large-scale distributed system and container technology. DaoCloud is leading company focusing on container technology in China, has been committed to helping enterprise customers to build cloud-native capability, from Cloud platform/DevOps/Microservice perspectives.

Robert (Bob) L. Galyen

SAE 电池标准指导委员会 主席
宁德时代 首席技术官

现年 64 岁的 Robert (Bob) L. Galyen 是电池储能领域公认的世界顶尖专家。目前他是全球最大电池制造商 CATL 的首席技术官、SAE International 电池标准指导委员会和 NAATbatt International 协会的主席，在全球电池行业中占据独一无二的领导位置。他拥有多项专利和出版物，还是多个董事会和技术咨询委员会的成员。43 年来的国际工作经验使其具备独特的全球商业视角，是全球电池储能方面名副其实的思想领袖。

Robert (Bob) L. Galyen

Chairman of SAE International Battery Standards Steering Committe
CTO, Contemporary Amperex Technology Limited

Robert (Bob) L. Galyen, age 64, is recognized as one of the top executives in the battery energy storage world. His position as CTO of CATL, the world's largest battery manufacturer, Chairman of both SAE International Battery Standards Steering Committee and NAATbatt International, provides him a unique leadership role in the entire global battery industry. He has patents, publications and participates on multiple BOD's and TAB's. The 43 years' international work experience has given him a unique perspective on worldwide business, making him uniquely qualified as a global energy storage thought leader.

吕晓峰

华为技术有限公司
LTE-V2X 产品线总经理

吕晓峰先生是华为 C-V2X 产品总经理，有着 20 多年电信领域的经验，曾从事研发、Marketing，销售领域的多个技术和管理岗位。曾先后担任华为欧洲无线产品行销部部长，法国分公司副总经理，无线战略业务发展部副总裁等职务。

目前他主管基于 C-V2X 技术的车路协同解决方案的规划设计、研发、验证、营销、产业和生态合作团队，致力于为智慧交通建设提供业界领先的车路协同解决方案和服务。

Xiaofeng LÜ

General Manager, LTE-V2X
HUAWEI

Mr. Lü Xiaofeng is the general manager of Huawei's C-V2X product line. He has more than 20 years of experience in the telecommunications field and has worked in various technical and management positions in R&D, marketing and sales.

He is currently responsible for the planning, design, development, marketing, industry and eco-system cooperation teams of C-V2X solutions, and is committed to providing industry-leading vehicle-road coordination solutions and services for autonomous driving and smart transportation.

程卫军

汉高电子材料事业部
导热产品技术服务专家

程卫军 , 现任汉高电子材料事业部导热产品技术服务专家，拥有超过 20 年导热行业从业经验，曾服务过多家全球知名汽车行业客户。

Michael CHENG

Thermal Technology Support Expert
Henkel Electronics

Michael has more than 20 years experience in thermal management domain, and supported a lot of global famous customers in Automotive industry.

Rikard Uddström

Zenuity 中国
执行董事长

Rikard Uddstrom 先生是哲内提公司 (Zenuity) 中国的执行董事长。Rikard Uddstrom 先生硕士毕业于瑞典，主修电子工程及计算机科学，同时还分别于加拿大和法国辅修过商业管理及语言学。Rikard Uddstrom 先生拥有 18 年汽车领域的丰富的专业经验，涵盖 IT 和软件技术。在加入到哲内提公司 (Zenuity) 之前，Rikard Uddstrom 先生曾负责沃尔沃汽车的全球 IT 开发和发展。除此之外，Rikard Uddstrom 先生还拥有 IT 及管理咨询的行业背景。Rikard Uddstrom 先生于 2017 年加入哲内提公司 (Zenuity) 并担任首席信息官 (CIO) 及首席数据官 (CDO)，自 2018 年 9 月起出任哲内提公司中国区的执行董事。

Rikard Uddström

Managing Director
Zenuity China

Rikard Uddström is the Managing Director of Zenuity in China. Rikard holds a MSc in Electrical Engineering and Computer Science from Sweden, supplemented with business and language studies from Canada and France. He brings 18 years of professional experience, combining the IT and Software industry with Automotive. Prior to joining Zenuity, he was globally responsible for IT Development within Volvo Cars and he also has a background from IT and Management consulting. He joined Zenuity in 2017 as CIO and CDO, and took on to lead Zenuity in China from September 2018.

王 成

ADI
BMS 资深应用工程师

王成，2013 年毕业于南京航空航天大学硕士学位电力电子专业。主要的研究方向是能量回收系统设计以及电池管理系统的设计。主要研究方向在电池 SOC/SOH 算法，高压电池系统的管理以及高性能模拟前端。目前作为 BMS 资深应用工程师就职于 ADI。

Cheng WANG

Senior Application Engineer for BMS
ADI

Cheng Wang received the B.S., M.S. degrees from Nanjing University of Aeronautics & Astronautics, Nanjing, China in 2010 and 2013, respectively, all in electronic engineering. The research is focusing on energy recycling system design and battery management system. He is be working for battery SOC/SOH algorithm and High voltage battery management system design and high performance analog front end for more than 6 years in the market. Now he is employee in Analog Devices Inc as Application Engineer for BMS.

张健琼

泛亚汽车技术中心
项目总工程师

张健琼，上海交大电子专业毕业，并从事汽车电子设计 18 年。完整经历了从传统汽车电子的设计到最初的驾驶员信息，导航娱乐到如今的智能汽车的互联系统，驾驶辅助系统和智能座舱系统的巨大变化。

Judy ZHANG

Project Chief Engineer
Pan Asia Technical Automotive Center

Judy graduated from Shanghai Jiaotong University majoring in electronics and has been working on automotive electronics design for 18 years. She is witness to the great evolution from traditional automotive electronic design to the early-stage driver information, from infotainment to today's connectivity system, driving assistance system and intelligent cockpit system of smart vehicles.

Jeff Yambrick

长城汽车
国际市场销售发展副总裁

Jeff Yambrick 是电气化行业的资深领导者，现任 SVOLT 国际销售与市场营销及业务开发副总裁。Jeff 已被任命为下一任 NAATBatt International 协会总裁，也是多个 SAE International 电池标准委员会的成员。他致力于为全球 OEM 和行业领军企业提供最高水平的工程解决方案和客户满意度，打造了成功的职业生涯。他曾在麦格纳 eCar / Steyr 电池系统公司和 Xalt 能源公司担任工程、销售 & 市场营销以及业务开发方面的领导职位。他全心致力于电气化和电气化的未来，以满足全球社群和用户的需要。

Jeff Yambrick

Vice President of International Sales & Marketing and Business Development
Great Wall Motors

Jeff Yambrick is a long time electrification industry leader and currently the Vice President of International Sales & Marketing and Business Development at SVOLT. Jeff is the President-Elect of NAATBatt International and is on several SAE International Battery Standards committees. He has built a career focused on success by delivering the highest level of engineering solutions and customer satisfaction with global OEMs and industry leading companies. He has served in leadership positions in Engineering, Sales & Marketing and Business Development at Magna eCar / Steyr Battery Systems and Xalt Energy. He is fully dedicated and engaged in the electrification and the future of electrification to meet the needs of the global community and the people living within it.

Edward Wagner

广西柳工机械股份有限公司
新技术与测试执行总监

Edward Wagner 来自美国，现任广西柳工机械有限公司新技术与测试执行总监。他曾任航空与军用电机及机电设备供应商 Electromech Technologies 的工程总监和股东 . 他曾在 CNH 担任项目经理。

Wagner 他曾在堪萨斯城一家从事重型公路建设的家族企业工作 , 在重型设备行业积累了多年经验。他拥有物理学士学位和机械工程硕士学位。既了解客户真实体验，又接受过工程领域相关教育和参与过相关实践，这在行业内是非常难能可贵的。

Wagner 曾获中国友谊奖和广西柳工 4180 级红点设计奖。他发明了行业内第一台垂直升降轮式装载机，拥有美国、中国、欧洲多项发明专利。

Edward Wagner

Executive Director of New Technology and Test
Guangxi Liugong Machinery Co.

Edward Wagner, American, serves as the Executive Director of New Technology and Test for Guangxi Liugong Machinery Co. He is the executive and technical leader of Liugong's BEV business. He served as Director of Engineering and part owner at Electromech Technologies, a supplier of electric motors and mechatronic equipment to aerospace and military industries. He served as Program Manager at CNH.

Mr. Wagner has life-long experience in the heavy equipment industry, having worked in a family business of heavy highway construction in Kansas City, Kansas. He has a BS in Physics and a MS in Mechanical Engineering. This combination of real customer experience plus engineering education and experience is very rare in the industry.

Mr. Wagner is a China Friendship Award winner, Red Dot Design Award winner for Liugong's 4180 Grader, the inventor of the industry first vertical lift Wheel Loader, and inventor of multiple patents in USA, China and Europe.

张 瀛 博士

长城汽车技术中心
智能驾驶系统开发部主管

张瀛，工学博士。长城汽车技术中心智能驾驶系统开发部主管。先后承担先行技术的研发及管理工作、国家智能汽车与智慧交通（京冀）示范区建设、车联网 V2X 技术研发等工作。目前主要负责推动长城汽车在车联网 V2X 技术及智慧交通领域项目的研发及应用落地。

Dr. Ying ZHANG

Head of Intelligent Driving System Development
GWM HAVAL R&D Center

Zhang Ying, D.E. is head of intelligent driving system development at GWM HAVAL R&D Center. He has been working in technical and managerial positions for the development of advanced technologies, engaged in the development of National Intelligent Vehicle and Transportation (Beijing and Hebei) Demonstration Zone, as well as various V2X technologies. He is working on the R&D and realization of V2X technologies and smart transportation applications at Great Wall Automobile.

董渊文

黑莓 QNX 公司
大中华区首席代表

董渊文，现任黑莓 QNX 公司大中华区首席代表。董渊文系黑莓 BTS 技术方案事业群大中华区首席代表，国家高级工程师职称，多年嵌入式软件行业、汽车电子系统行业经验，实时操作系统专家。曾先后在大唐电信集团、阿尔卡特朗讯、瑞典宜能嵌入式系统等业界领先的公司从事研发、管理和市场工作，发表学术论文数十篇，并由核心期刊收录。

William DONG

Chief Representative of Greater China
BlackBerry QNX

Yuanwen Dong, BlackBerry QNX Chief representative of Greater China. Rich experience in embedded software, automotive electronics industry and expert in RTOS. Worked for advanced company, Datang group, Alcatel-lucent, ENEA as R&D, management and marketing. Published dozens of thesis and collected by SCI.

Alexandria Nafari 博士

博格华纳
xEV 系统产品经理

Alexandra Nafari 博士是博格华纳公司的 xEV 系统产品经理，专注于电力推进系统的研发。他持有电气工程博士学位，自 2012 年起从事汽车电气化工作。Alexandra 的第一份工作是在瑞典哥德堡市的沃尔沃汽车公司研发电池系统，并以技术专家的身份长期研究电力推进的高压系统。在博格华纳担任多款 48V 和高压产品的技术经理之后晋升至目前的职位。

Dr. Alexandria Nafari

Product Manager for xEV Systems
BorgWarner

Dr Alexandra Nafari is the product manager for xEV systems at BorgWarner, with focus on electric propulsion systems. She has a PhD in Electrical Engineering and worked with electrification in vehicles since 2012. Alexandra started her work at Volvo Cars in Gothenburg, Sweden with battery systems and continued with High Voltage Systems for electric propulsion as technical specialist. At BorgWarner she has been the technical project manager for various 48V and High Voltage products before her current position.

杨 柯

上海晶众信息科技有限公司
晶众地图副总裁兼网联汽车事业部首席运营官

杨柯，硕士研究生毕业于华北电力大学软件工程专业，师从中国人工智能学会理事吴克河教授。曾于九五智驾历任研发主管、技术总监、产品总监、公司副总裁。先后发表省部级以上论文 3 篇。是伴随中国车联网 TSP 的成长起来第一批汽车“网联化”软件研发高级工程师、项目管理（PMP）专家、产业规划师。现全面负责公司智能化高精度地图在主机厂内的应用与推广工作。

Ke YANG

Vice President of Bright Map and COO of Networking Automotive Division
BrightMap Science and Technology Co., Ltd.

Ke YANG, graduated from NCEPU(North China Electric Power University) with a major in software engineering and studied under professor Wu Kehe, director of Chinese association of artificial intelligence.

He once worked as R&D supervisor, technical director, product director and vice president of YESWAY INFORMATION TECHNOLOGY COMPANY.

He has published three papers in magazines at or above the provincial level.

He is one of the first batch of Automotive “networking” software R&D senior engineers, Project Management Professionals (PMP) and Industrial planners who have grown up with the China Internet of Vehicles’ Telematics Service Providers(TSP).

Now he is fully responsible for the application and promotion of the our company's intelligent high-precision map in the OEM.

许 刚

古加诺新能源汽车（常熟）有限公司
高级工程师

Aaron Xu 是古加诺新能源汽车（常熟）有限公司的高级工程师，负责 1TE270S 平台减速器的设计与开发。三年来，他一直致力于新能源汽车的研发。目前，他正在为多乘用车应用程序开发共享平台。

Aaron XU

Senior Engineer
Graziano Fairfield E-Drive Systems (Changshu) Co., Ltd.

Aaron Xu, Senior engineer from Graziano Fairfield E-Drive Systems (Changshu) Co., Ltd. Charging for 1TE270S platform reducer design and development. He has specialized in NEV research and development since three years. Currently he's working on the shared platform for multi passenger car applications.

戴 震 博士

禾多科技
地图及模拟器负责人

戴震，德国锡根大学博士。曾任职于德国航空航天中心和 Garmin 导航，为戴姆勒公司研发了世界上第一套基于 NDS 地图的汽车导航系统。现任禾多科技地图及模拟器负责人。

Dr. Zhen DAI

Head of The R&D of HD Maps and Simulators
HoloMatic

Dr. Zhen Dai obtained his master and Ph.D. degrees from the University of Siegen in Germany.

Dr. Dai worked at the German Aerospace Center and Garmin Navigation. While at Garmin, he developed the world's first NDS map-based vehicle navigation system for Daimler. After joining HoloMatic, Dr. Dai is responsible for the R&D of HD maps and simulators.

王宏凯

上海鹰峰电子科技股份有限公司
电容器产品线技术经理

2005 年 4 月—2007 年 7 月 普鲁卡姆电器 (上海) 有限公司 任 机械设计师
2007 年 8 月至今，工作于上海鹰峰电子科技股份有限公司，现任职电容器产品线 技术经理

Hongkai WANG

Technical Manager of Capacitor Line
Shanghai EAGTOP Electronic Technology Co., Ltd.

April 2005 – July 2007 Mechanical Design at Procom Shanghai
August 2008 – Manager of Capacitor Line Technology, EAGTOP

张达睿 博士

东风汽车集团有限公司技术中心
智能网联部主管工程师

张达睿博士于 2018 年加入东风汽车集团有限公司技术中心。他目前就职于智能网联部的感知融合团队从事 ADAS 和自动系统的研发工作。他的关注领域包括感知融合，安全关键系统的软件工程，以及利用大数据来加速系统开发。他获得美国克莱姆森大学汽车工程专业的博士学位，纽约州立大学布法罗分校的硕士学位，和上海理工大学的学士学位。

Dr. Darui ZHANG

Chief Engineer, Intelligent Vehicle Division
Dongfeng Motor Corporation Technical Center

Dr. Darui Zhang joined Dongfeng Motor Corporation Technical Center in 2018. He is currently working in the sensor fusion team in Intelligent Vehicle Division on research and development projects of the ADAS and autonomous system. His interests include perception, software engineering in safety critical system, and leveraging the large scale of data to boost the development process. He received his Ph.D. degree in automotive engineering from Clemson University, USA, master's degree from SUNY Buffalo, and bachelor's degree from the University of Shanghai for Science and Technology.

杜 磊

清华大学

杜磊，清华大学的在读博士。他的专业是动力工程和工程热力学。他致力于发动机震动分析和控制研究有 6 年时间。他设计了安装在发动机轴上的高速和高精确扭矩传感器，可分析发动机启动特性。他利用气缸压力传感器、编码器和扭矩传感器配置了试验台，调查扭转振动可减少的程度。同时，他还引入了一个发动机启动过程中的震动强度指数。利用庞特里亚金最小值原理，他解决了 ISG 电机扭矩最佳控制的问题以实现震动最小化。

Lei DU

Tsinghua University

Lei DU is a Ph.D. Candidate in Tsinghua University. His major is Power Engineering and Engineering Thermal Dynamics. He has been focusing on engine vibration analysis and control for about 6 years. He designed a high speed and high precision torque sensor installed on engine shaft to analyze engine start behavior. He set up a test bench with cylinder pressure sensors, encoders, and torque sensors to investigate to what extend the torsional vibration could be reduced. He has also bought out an index of vibration severity during engine start process. By applying Pontryagin's minimum principle, he has worked out the optimal control of ISG motor torque to minimize the vibration.

薛晓卿 博士

中国软件评测中心
智能网联汽车测试部副主任

薛晓卿，北京理工大学博士，中国软件评测中心智能网联汽车测试部副主任，主要从事智能网联汽车软件和信息安全测试，汽车智能计算平台研究等工作。

Dr. Xiaoqing XUE

Deputy Head of ICV Testing
China Software Testing Center

Xue Xiaoqing graduated from Beijing Institute of Technology with Ph.D. degree. As deputy head of ICV testing, China Software Test Center, he works on ICV software and security testing and study of automotive intelligent computing platform.

侯晓慧

清华大学

侯晓慧，清华大学车辆与运载学院在校博士生，汽车安全与节能国家重点实验室研究成员，主要研究方向：线控制动系统、制动能量回收策略、电动汽车整车动力学控制等。

Xiaohui HOU

Tsinghua University

Xiaohui Hou is currently working toward the Ph.D. degree of School of Vehicle and Mobility, Tsinghua University , and researches in State Key Laboratory of Automobile Safety and Energy . Her research interests include brake-by-wire, regenerative braking strategy and electric vehicle dynamics control.

Andreas Gau

dSPACE 中国
销售经理

Andreas Gau 自 2016 年起任职于 dSPACE 公司销售部门。在此之前，他参加了德意志学术交流中心和中国政府奖学金合办的学位项目，获得亚琛工业大学和清华大学机械工程和商业管理以及汽车工程双硕士学位。他于 2018 年起开始在上海工作，就任 dSPACE 销售工程师和应用顾问。当前他的职位是 dSPACE 中国的销售经理，工作重点之一是新能源和智能网联汽车的业务发展。

Andreas Gau

Sales Manager
dSPACE China

Andreas Gau works in the Sales Department of dSPACE GmbH since 2016. Previously, he participated in a Joint Degree Program supported by German DAAD and Chinese CSC, receiving two Master Degrees from RWTH Aachen University and Tsinghua University in Mechanical Engineering and Business Administration, and Automotive Engineering. Having started at dSPACE as a Sales Engineer and Applications Consultant, he is now based in Shanghai since 2018. In his current role as Sales Manager of dSPACE China, one of his focuses is the business development in the areas of New Energy and Intelligent Connected Vehicles.

王 羽

中国汽车技术研究中心
智能汽车研究室暨汽车软件测评中心主任

王羽，中国汽车技术研究中心智能汽车研究室暨汽车软件测评中心主任，承担世界智能驾驶挑战赛秘书长、国际标准化组织道路车辆委员会车辆动力学分委会（ISO/TC22/SC33）WG9 工作组自动驾驶测试场景国际标准制定支撑专家、全国汽车标准化技术委员会智能网联汽车分技术委员会（TC114/SC34）自动驾驶工作组专家、全国信息安全标准化技术委员会（TC260）WG5 工作组专家，国际自动机工程师学会（SAE International）会员等学术职务。

Yu WANG

Director of Intelligent Vehicle and Automotive Software Testing Office
CATARC

Wang Yu, Director of Intelligent Vehicle and Automotive Software Testing Office in CATARC, Director of CENTRAL Artificial Intelligence and Autopilot Laboratory, responsible for the Secretary of the World Intelligent Driving Challenge, the Vehicle Dynamics Subcommittee of the International Organization for Standardization Road Vehicle Committee (ISO/TC22/SC33) WG9 Working Group Automated Driving Test Scenario International Standards Development Supporting Expert, National Automotive Standardization Technical Committee Intelligent Networking Automotive Sub-Technical Committee (TC114/SC34) Automated Driving Working Group Expert, National Information Security Standardization Technical Committee (TC260) WG5 working group experts, members of the International Society of Automated Mechanical Engineers (SAE International).

以下展商企业信息由赞助以及参展公司提供。
Exhibitor Directory text is published as submitted by sponsoring & exhibiting companies.

A

Analog Devices

地址：上海市浦东新区张江高科技园区祖冲之路2290号展想广场5楼
www.analog.com/cn

Analog Devices (Nasdaq: ADI)是全球领先的高性能模拟技术公司，致力于解决最艰巨的工程设计挑战。凭借杰出的检测、测量、电源、连接和解译技术，搭建连接现实世界和数字世界的智能化桥梁，从而帮助客户重新认识周围的世界。

详情请浏览ADI官网 www.analog.com/cn 。

Analog Devices

Address: 5F, Sandhill Plaza, 2290 Zuchongzhi Road, Zhangjiang Hi-Tech Park, Pudong New District, Shanghai, PRC
www.analog.com

Analog Devices (Nasdaq: ADI) is the leading global high-performance analog technology company dedicated to solving the toughest engineering challenges. We enable our customers to interpret the world around us by intelligently bridging the physical and digital with unmatched technologies that sense, measure, power, connect and interpret.

Visit http://www.analog.com

E

上海鹰峰电子科技股份有限公司

地址：上海市松江区石湖荡工业园区唐明路258号
www.eagtop.com

上海鹰峰电子科技股份有限公司是一家专注于电力电子无源器件研发、生产销售的高新技术企业。2016年公司成功登陆新三板，股票代码839991。

公司跟随着新能源汽车行业的起步与发展，为用户提供薄膜电容器、叠层母线、高频电感等，产品已成熟应用于各大主流PHEV、EV车型。2012年公司通过IATF 16949:2016质量管理体系认证。随着新能源汽车用户需求的不断提升，公司也将在技术和服务上继续创新，为客户提供更加信赖的产品和解决方案支持，为绿色低碳出行做出我们的贡献。

Shanghai Eagtop Electronic Technology Co.,Ltd.

Address: 258 Tangming Road, Shihudang, Songjiang District, Shanghai, PRC
www.eagtop.com

Shanghai EAGTOP electronic technology Co., Ltd is specialized in R&D, manufacturing and sales of Passive Power Electronics Devices. EAGTOP successfully went public in “new three board” in 2016. (Stock Code: 839991)

Following the start and development of new energy automotive industry, EAGTOP provides Laminated Busbar, Film Capacitor, Liquid Cooling Plates for IGBT & battery and High Frequency Inductor for customers, our products have been widely applied to major mainstream PHEV and EV industry. EAGTOP has been certified by IATF 16949:2016 certification since 2012. With the increasing demand of new energy vehicle users, EAGTOP will continue to innovate in technology and services, to provide customers with more reliable products and solutions, to make contribution to a greener low-carbon society.

F

富朗巴软件科技（上海）有限公司

地址：上海市浦东新区浦东南路855号23楼E座
www.forum8.co.jp/chinese/

FORUM8公司创业以来以软件包开发技术为基础，以结构物设计为首，提供支援土木、建筑设计的软件、技术服务。近年来随着虚拟现实的开发，应用范围延伸到包括交通、汽车研发等更广泛的项目领域。

本公司的成长基础在于独创性通用软件的开发。UC-win/Road作为一款实时虚拟现实软件开发于2000年，从初版发布以来，不断开发完善丰富的三维场景建模、驾驶模拟和演示等功能。

这些新产品、新技术的开发获得了外界的高度评价，先后获得日本经济产业省的委托研究、NEDO的助成项目。以软件相关的技术服务、软件本身为核心的集成业务也以驾驶模拟器系统等为首不断成长，先后成功拿下中国交通部公路科学院的大型模拟器的国际投标，丰田公司、九州大学、京都大学的高端研究用驾驶模拟器等业务。

FORUM8 Technology Development (Shanghai) Co., Ltd.

Address: 23/E, 855 World Plaza Pudong South Road, Pudong New District, Shanghai, PRC
www.forum8.com

Since the company's foundation, FORUM8 have been providing software and technical services that support civil engineering and chitectural/structural design.Our recent developments in Virtual Reality software have lead to any new applications especially those in traffic and automobile research. In fact, FORUM8's VR technology is being utilized in those researches and indeed just about any type of project.

Since year 2000, we have been continuously enhancing our premier 3D VR software UC-win/Road and three dimensional analysis program UC-win/FRAME(3D).

Since the evaluation on the our development for these new products and new technologies is notably high from outside of the company, we even received an aid fund from Ministry of Economy for consigned development and NEDO.Moreover, technical service for our software and integration work with our software as a core such as driving simulator, are making further growth and improvements. Our recent success include being picked by the Chinese Traffic and Transport Department through international tender as the only successful candidate capable of delivering a large driving simulator that meets their criteria, and receiving an order of driving simulator designed for high level research from Kyushu University and Kyoto University not to mention the huge order of a very large driving simulator from the aforementioned department.

K

是德科技（中国）有限公司

地址：北京市朝阳区望京北路3号4层
www.keysight.com

是德科技（NYSE：KEYS）是一家领先的技术公司，致力于帮助企业、服务提供商和政府客户加速创新，创造一个安全互联的世界。从设计仿真、原型验证、生产测试到网络和云环境的优化，是德科技提供了全方位的测试与分析解决方案，帮助客户深入优化网络，进而将其电子产品以更低的成本、更快地推向市场。我们的客户遍及全球通信生态系统、航空航天与国防、汽车、能源、半导体和通用电子终端市场。2017 财年，是德科技收入达 32 亿美元。2017年4月，是德科技完成对 Ixia 的收购。Ixia 公司在网络测试、可见性和安全解决方案领域具有十分雄厚的实力。

更多信息，请访问 www.keysight.com。

Keysight Technologies, Inc.

Address: 4F, 3 Wangjingbei Road, Chaoyang District, Beijing, PRC
www.keysight.com

Keysight Technologies, Inc. (NYSE: KEYS) is a leading technology company that helps enterprises, service providers, and governments accelerate innovation to connect and secure the world. Keysight's solutions optimize networks and bring electronic products to market faster and at a lower cost with offerings from design simulation, to prototype validation, to manufacturing test, to optimization in networks and cloud environments. Customers span the worldwide communications ecosystem, aerospace and defense, automotive, energy, semiconductor and general electronics end markets. Keysight generated revenues of $3.2B in fiscal year 2017. In April 2017, Keysight acquired Ixia, a leader in network test, visibility, and security.

More information is available at www.keysight.com.

以下展商企业信息由赞助以及参展公司提供。
Exhibitor Directory text is published as submitted by sponsoring & exhibiting companies.

K

昆易电子科技（上海）有限公司
Kunyi electronics technology (Shanghai) co., LTD

昆易电子科技（上海）有限公司

地址：上海市浦东新区新金桥路1888号42号楼2层
www.vcarsystem.com

昆易电子科技（上海）有限公司成立于2010年，从事嵌入式软硬件开发测试、总线开发测试设备研发、生产和销售，服务于汽车、轨道交通、电力等市场，助力全球企业研发。

昆易电子秉承让工程更简单Make engineering easier的理念，创新的开发工具，让客户能够在电气化、智能化和网联化变革中，从容应对研发时间、成本和质量的苛刻要求，提供面向应用的量身定制的解决方案，服务于研发的整个生命周期，从早期开发验证，到实车测试，从单系统到多系统，从虚拟测试到半实物台架，直至售后诊断服务，昆易电子可以完成对软件及系统的高级测试验证，为产品的开发提供保障，包括：

快速原型控制器及工具链、基础软件开发服务、总线工具（CAN/Lin/Ethernet）及测试服务、HIL测试台架及测试服务、半实物仿真测试台架（EPS，底盘域，动力域等）、整车标定解决方案及数据采集、记录和分析、ADAS整车测试解决方案、研发大数据平台、产线批量刷写及功能检测、售后诊断工具。

Kunyi Electronics

Address: 2F, 42 Block, 1888 New Jinqiao Road, Pudong New District, Shanghai, PRC
www.vcarsystem.com

Founded in 2010, Kunyi Electronic Technology (Shanghai) Co., Ltd. is engaged in the development, production and sales of embedded software and hardware development and testing. Serving the automotive, rail transit, electric power and other markets, helping global enterprises to have cutting edge R&D tool chain.

Kunyi Electronics adheres to the concept of 'Making Engineering Easier', and the innovative development tools enable customers to meet the demanding requirements of R&D timing, cost and quality during the vehicle transformation of electrification, intellectualization and connection. The customized service and solution serve the entire lifecycle of R&D, from early development verification to real-world testing, from single-system to multi-system, from virtual testing to semi-physical benches, Kunyi Electronics can completely provide advanced test verification of software and systems to support product development, including:

Rapid prototype controller and tool chain/Basic software development services/Bus tool (CAN/Lin/Ethernet) and test service/HIL test bench and test service/Semi-physical simulation test bench (EPS, chassis domain, drive line domain, etc.)/Vehicle calibration solution and data collection, recording and analysis/ADAS and AV vehicle test solution/Big data platform for R&D/Mass production equipment of ECU flashing and function detection/After-sales diagnostic tools.

I

INTREPID CONTROL SYSTEMS
www.intrepidcs.com

美国英特佩斯控制系统有限公司

地址：上海市浦东新区金海路1000号金领之都16号楼902室
www.intrepidcs.com.cn

美国英特佩斯控制系统有限公司（Intrepid Control Systems, Inc.）成立于1994年，总部坐落于美国密歇根州的底特律。作为全球知名的车载网络测试工具供应商，一直致力于CAN、LIN、MOST、Flex Ray、Automotive Ethernet等总线技术及协议规范的研究与开发。产品覆盖总线数据实时监控、数据离线采集记录、ECU节点仿真、诊断、数据分析以及数据记录仪等领域。英特佩斯拥有广泛的客户群。从大型的企业如通用汽车到小型的公司。英特佩斯国际化的销售，将其软硬件产品销售到世界各个国家和地区，如美国、中国、英国、法国、德国、加拿大、韩国、日本、墨西哥，比利时，新加坡等等。坐落于汽车工业的中心，英特佩斯的面向汽车工业，对汽车相关的领域做出了贡献，并参与各种汽车工业的展会和研讨会，站在汽车科技的前沿。地理优势使得英特佩斯能够提供优秀的客户支持。

英特佩斯在中国、印度、德国、日本、韩国、澳大利亚等设立了分公司或办事处。英特佩斯优质的产品及售后服务已赢得了汽车整车厂及零部件供应商的一致好评，被美国通用汽车（GM）列为全球指定测试工具供应商。

美国英特佩斯控制系统有限公司上海代表处自2006年成立以来，一直以优质的产品与周到的技术支持服务于本地客户，如泛亚（PATAC）、上汽通用（SGM）、克莱斯勒（CHRYSLER）、大众（VOLKSWAGEN）、奇瑞捷豹路虎（CJLR）、福特（FORD）、上汽（SAIC）、北汽（BAIC）、广汽（GAC）、东风（DFM）、奇瑞（CHERY）、吉利（GEELY）、比亚迪（BYD）、大陆（CONTINENTAL）、德尔福（DELPHI）、伟世通（VISTEON）、李尔（LEAR）、上海交通大学、浙江大学等知名厂商及相关科研机构。2018年又分别在深圳和北京设立代表处。公司在包括电子硬件和软件在内的嵌入式系统开发方面有经验丰富，为客户提供汽车网络产品的定制测试工具。我们的性价比和服务是我们最大的优势。

Intrepid Control Systems, Inc.

Address: Rm. 902, Building 16, 1000 Jinhai Road, City of Elite, Pudong New District, Shanghai, PRC
www.intrepidcs.com

Intrepid Control Systems, Inc., established in 1994, is headquartered in Detroit, Michigan. As a world-renowned vehicle network testing tool supplier, the company has been committed to the research and development of bus technology and protocol specifications such as CAN, LIN, MOST, Flex Ray, Automotive Ethernet, etc. The products cover real-time monitoring of bus data, offline data acquisition and recording, ECU node simulation, diagnosis, data analysis, data recorder and other fields.

Intrepid has a broad customer base, from large enterprises like GM to small companies. Intrepid sells its software and hardware products to various countries and regions, such as the United States, China, Britain, France, Germany, Canada, South Korea, Japan, Mexico, Belgium, Singapore and so on. Focused on automotive technologies, Intrepid is a great contributor to the industry in particular areas. As an active participant of various automotive industry exhibitions and seminars, Intrepid is always at the forefront of automotive technology. Geographical advantage enables Intrepid to provide excellent customer support.

Intrepid has set up branches or offices in China, India, Germany, Japan, Korea and Australia. Intrepid's quality products and after-sales services have won praise from automobile manufacturers and parts suppliers. The company is listed as the global designated testing tool supplier by GM.

Since the establishment of Intrepid Shanghai Office in 2006, it has been providing high-quality products and comprehensive technical support to local customers, including PATAC, SGM, CHRYSLER, VOLKSWAGEN, CJLR, FORD, SAIC, BAIC, GAC, DFM, CHERY, GEELY, BYD, CONTINENTAL, DELPHI, VISTEON, LEAR, Shanghai Jiaotong University, Zhejiang University and other well-known Manufacturers and related research institutions. In 2018, it has set up offices in Shenzhen and Beijing respectively.

Experienced in the development of embedded systems including electronic hardware and software, Intrepid provides customers with tailor-made testing tools for automotive network products. Our cost performance and service are our biggest advantages.

宁波永久磁业有限公司

地址：浙江省宁波市北庄桥工业区康庄南路518号
www.pm-magnets.com
联系人：余飞锋　　联系电话：13957886322

宁波永久磁业有限公司成立于1997年，现有员工500余人，占地面积6万平方米。建立以来，在中科院宁波材料所、北京科技大学、浙江大学等研究机构以及公司内部的省级工程技术研发中心的技术支撑下，长期以来致力于高性能稀土永磁材料的研究、开发及批量化生产，公司配备国际先进的生产设备及检测仪器，现有烧结钕铁硼产能5000吨/年。

目前公司产品出口占比达80%，产品远销欧洲、美洲、东南亚等地区，主要应用于中高端电机（汽车电机、风电电机）、消费类电子、医疗及清洁能源等领域。

Ningbo Permanent Magentics Co.,Ltd.

Address: 518 Kang Zhuang Nan Road, Jiangbei District, Ningbo, Zhejiang, PRC
www.pm-magnets.com
Contact us: Feifeng YU　　p: 13957886322

Ningbo permanent Magentics Co.Ltd was established in 1997 and occupies a total area of 60,000m2, 500 employees. The company is equipped with international standard advanced production and testing equipment,the capacity is 5000 tons/year.

At present 80% products exported to oversea, and products are exported to Europe, America, Southeast Asia and other regions, mainly applied in Semi-high-end motor,consumer electronics,medical and clean energy and other fields.

北美

美国 宾夕法尼亚州 - 全球总部
400 Commonwealth Drive
Warrendale, PA 15096, USA
电话:+1.724.776.4841
传真:+1.724.776.0790

美国 密歇根州
755 West Big Beaver, Suite 1600
Troy, MI 48084, USA
电话:+1.248.273.2455
传真:+1.248.273.2494

美国 华盛顿哥伦比亚特区
1200 G Street, NW, Suite 800
Washington, DC 20005, USA
电话:+1.202.463.7318
传真:+1.202.463.7319

欧洲

比利时 布鲁塞尔
280 Boulevard du Souverain
1160 Brussels, Belgium
电话:+32.2.789.23.44
Email: info-sae-europe@associationhq.com

英国 伦敦 - SAE 航空航天标准
1 York Street, London
W1U 6PA, United Kingdom
电话:+44 (0) 207.034.1250
传真:+44 (0) 207.034.1257

亚洲

中国 上海
中国上海市虹口区四川北路1350号
利通广场2503室 (200080)
电话:+86-21-6140-8900
传真:+86-21-6140-8901

全球官网:www.sae.org
中文网站:www.sae.org.cn
客服中心:customerservice@sae.org
中国办公室:chinaoffice@sae.org

NORTH AMERICA

Warrendale, PA, USA - Headquarters
400 Commonwealth Drive
Warrendale, PA 15096
p +1.724.776.4841
f +1.724.776.0790

Troy, MI, USA
755 West Big Beaver, Suite 1600
Troy, MI 48084
p +1.248.273.2455
f +1.248.273.2494

Washington, DC, USA
1200 G Street, NW, Suite 800
Washington, DC 20005
p +1.202.463.7318
f +1.202.463.7319

EUROPE

Brussels, Belgium
280 Boulevard du Souverain
1160 Brussels, Belguim
p +32.2.789.23.44
e info-sae-europe@associationhq.com

London, UK - SAE Aerospace Standards
1 York Street
London
W1U 6PA, United Kingdom
p +44.207.034.1250
f +44.207.034.1257

ASIA

Shanghai, PRC
Room 2503, 1350 North Sichuan Rd,
Hongkou District,
Shanghai, 20080, P.R. China
p +86.21.6140.8900
f +86.21.6140.8901