

AUTOMOTIVE ETHERNET & IP TECHNOLOGY DAY 2023 SAO PAULO, BRAZIL

UBIQUITOUS ETHERNET IN-VEHICLE NETWORKS

September 19th 2023





Bem-Vindo

Welcome

Herzlich Willkommen

MODERATOR THOMAS HOGENMÜLLER

- Studied Electrical Engineering w/ exchange semester in Beijing (China) and Florianopolis (Brazil)
- 2004 Bosch Stuttgart Corporate Research on Powerline Communication and FlexRay Physical Layer
- 2007 Bosch Palo Alto Wireless Sensor Networks for In-Vehicle Networks and non-Automotive applications
- 2011 Bosch Stuttgart Head of In-Vehicle Networks
 - Standardization of Automotive Ethernet
 - Enabling new “Consumer Electronics” suppliers
 - Many new product innovations (take a look at our booth)
- 2019 Bosch Stuttgart Director at Vehicle Computer and Zonal ECUs
 - Project “NextCarNet”, high-speed sensors, remote control, ComNet engineering process
 - Project acquisitions, supplier management, standardization



NETWORKS BEYOND BORDERS

Interim Meeting IEEE802.3 in Campinas, BR September 11th to 14th

- 60 met to standardize various topics of Ethernet Physical Layer
- Brazilian participants got a good impression on how these standards are made
- Truly international experience:
 - Participants from North America, Europe, Asia and Australia
 - Amazing local support with a lot of Brazilian flavor
- 3 dedicated sessions for Automotive



NETWORKS BEYOND BORDERS



We had also a lot of fun:

- Social Event w/ Churrasco (BBQ), Cocktails and interactive Live music
- IEEE guys on stage w/ Brazilian, American, Australian, British, French, and German songs
- Two new Japanese cocktail creations contributed to Brazilian menu (you may ask later today for the “Goto san special”)



NETWORKS BEYOND BORDERS

Open Alliance All Members Meeting at September 21st

Open Alliance representative Oliver Creighton will talk more about after the first break at 11:00.



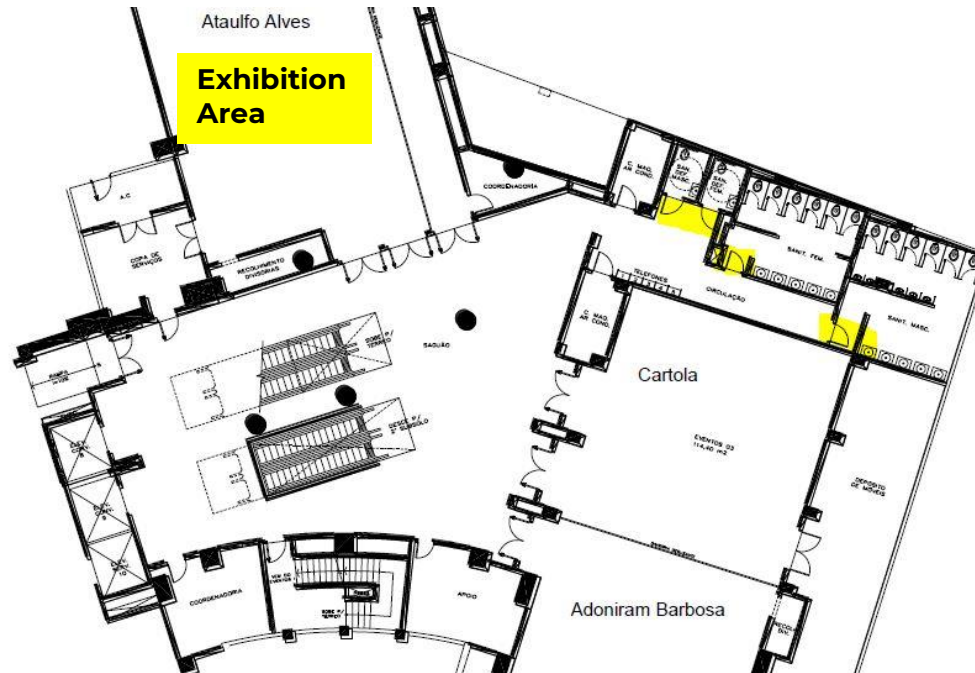
AUTOMOTIVE ETHERNET & IP TECHNOLOGY DAY

Agenda

- 9:00 – 10:00 **Opening Master of Ceremony and Keynote**
Thomas Hogenmüller (Bosch) & Axel Kirschbaum (Bosch)
- 10:00 – 12:00 **Time Sensitive Networking**
- 12:00 – 14:30 **Safety & Security**
- 14:30 – 16:00 **YANG, SDN**
- 16:30 – 18:00 **Interactive Workshop on Innovation and Entrepreneurship**
Robert Metcalfe
- 18:00 – 20:00++ **Networking Dinner**
 - 9:00 – 10:00 **Network and Architecture**
 - 10:00 – 11:30 **Service Oriented Architecture**
 - 11:30 – 12:00 **Application, Higher Layer Connectivity**
 - 12:00 – 16:30 **PHY, Switch, Microcontroller**
 - 16:30 – 17:00 **Validation and Test**
 - 17:00 **Closing Remarks**

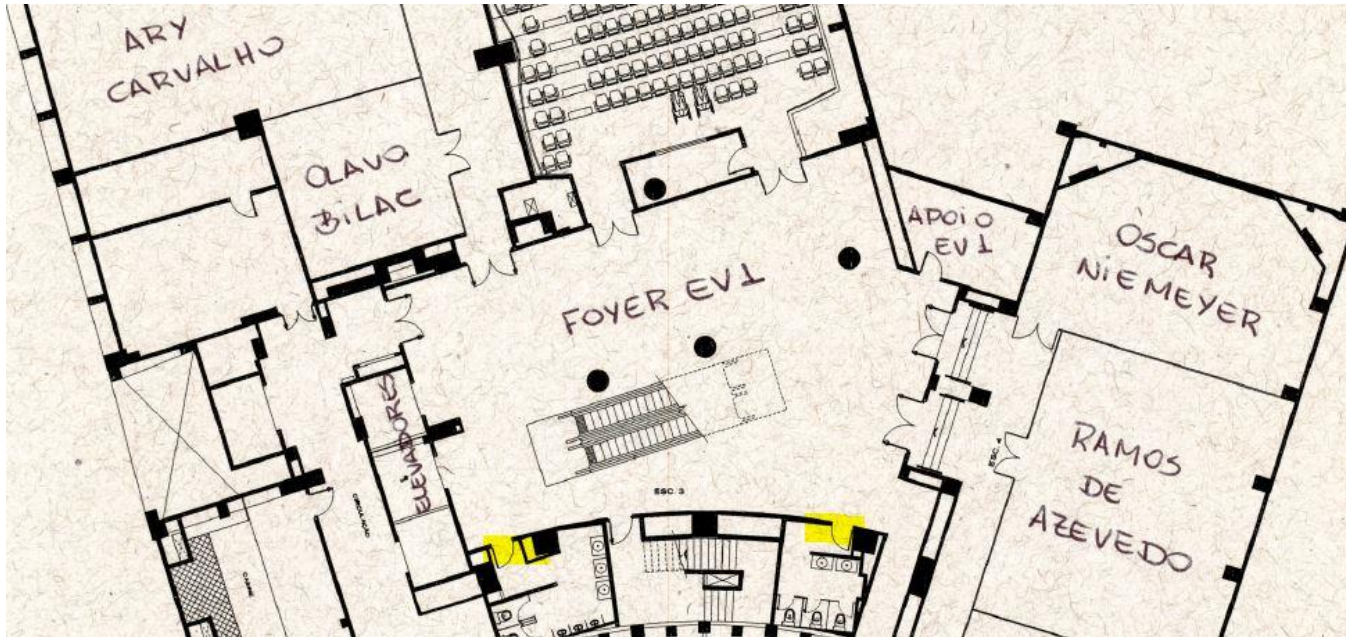
HOUSEKEEPING

Restrooms in the Exhibition Area



HOUSEKEEPING

Restrooms in the auditorium area



HOUSEKEEPING

Lunch and Networking Dinner in the Jaraguá restaurant at 2nd floor

On the back of your badge you will find tickets for lunch for day 1 and 2



SPEAKER'S CORNER

Outside the auditorium

Opportunity to discuss technical presentations with the speakers during the break

Speakers will be available at the speaker's corner for 10-15 minutes

HOUSEKEEPING

As in any other large city please be mindful of your surroundings

- **Put your phone securely in your pocket**
- **Don't wear visible jewelry**
- **After sunset please use Uber to move around**
- **Whenever possible walk in groups**

THANK YOU

Steering Committee

Robert Bosch – Thomas Hogenmueller (SC Chair)

Continental Automotive – Daniel Hopf (SC Vice Chair)

Ethernovia – Chris Mash (PC Chair)

Intrepid Control Systems – John Simon (PC Vice Chair)

BMW – Kirsten Matheus

DENSO (JASPAR) – Yasuhiro Kotani

Ford – Amrit Gopal

General Motors – Natalie Wienckowski

Renault – Josetxo Villanueva

Stellantis – Abedulah Alkhateeb

Toyota – Hideki Goto

Volvo – Hoai Hoang Bengtsson

IEEE SA – Rudi Schubert

Program Committee

Ethernovia – Chris Mash (Chair)

Intrepid Control Systems – John Simon (Vice Chair)

Axonon – Manfred Kunz

BMW – Karl Budweiser

Continental Automotive – Michael Ziehensack (Elektrobit)

General Motors – Prathap Venugopal

HSP Design – Steve Carlson

JLR – Syreeta Bath

Marvell Technology – Amir Bar-Niv

Microchip – Laurent Manhes

Microchip – Mike Jones

Molex – Haysam Kadry

NXP – Don Pannell

NXP – Günter Sporer

Renault – Josetxo Villanueva

Robert Bosch – Damon Martini

Stellantis – David Stiles

Techpoint Consulting LTD – Greg Destexhe

UFPE (Universidade Federal de Pernambuco) – Divanilson Campelo

THANK YOU

Robert Metcalfe

Steve Carlson (HSD)

Rosalinda Saravia (IEEE SA)

Heather Robinson (IEEE SA)

Thais Meroni (Bosch)

Divanilson Rodrigo de Sousa Campelo (Universidade Federal de Pernambuco)