

# SCHEDULE.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
09:00		Keynote 2 (plenary)	Keynote 4 (plenary)	Lean Startup Machine	Lean Startup Machine	Lean Startup Machine: Final Pitches, Awards
10:00	Welcome Address Conference Opening	Morning Coffee	Morning Coffee	Lean Startup Machine	Lean Startup Machine	
11:00	Opening Keynotes	Keynote 3 (plenary)	Keynote 5 (plenary)	Lunch	Lunch	Closure, Farewell
12:00		Lunch	Lunch	Breakout Workshop Session Research Topics	Lean Startup Machine	
13:00			Keynote 6 (plenary)	Coffee Break		
14:00	Keynote 1 (plenary)	Breakout Workshop Session Research Topics	Midweek Social Event	Agoro Poster Fair	Agoro Poster Fair	
15:00	Coffee Break	Social Break		Agoro Poster Fair		
16:00	Poster Pitches	Dinner				
17:00	Coffee Break	Festive Chart				
18:00	Agoro Poster Fair					
19:00	Cocktail Reception & Dinner					
20:00						

**DRAFT PROGRAM.**

- **Keynote/breakout track** – Learning from invited speakers presenting their views and/or research.
- **Poster track** – presentation & discussion of conference submissions.
- **Lean startup machine** – develop innovative ideas in a competitive startup pitching format.

**BMW HR:** interview track with development experts. Academic Career Coaching option.

# ORGANIZATION.



July 15-July 20, 2019, Fall (Lenggries), Bavaria, Germany.

**Venue**  
Hotel Jäger von Fall, Lenggries, Bavaria, Germany.

**Call for Contributions**  
<https://easychair.org/cfp/driveme2019>

**Scientific Committee**

**Prof. Ulrich Finger** (EURECOM), co-chair  
**Prof. Jérôme Haerri** (EURECOM)  
**Prof. Andreas Herkersdorf** (TUM), co-chair  
**Prof. Benoit Huet** (EURECOM)

**Prof. Raphaël Troncy** (EURECOM)  
**Prof. Jörg Ott** (TUM)  
**Hannemor Keidel** (TUM)  
**Hans-Jörg Vögel** (BMW Group)  
**Michael Würtenberger** (BMW Group), co-chair

**Organizing committee**

**Paul Alibert** (Bureau de Coopération Universitaire, french embassy)  
**Elsa-Claire Elisée** (DFH)  
**Prof. Jérôme Härrri** (Eurecom), co-chair  
**Axel Honsdorf** (BayFrance), co-chair  
**Zuzana Petrik** (BayFrance)  
**Stefanie Schindler** (BMW Group)

**Martin Tholund** (BMW Group)  
**Hans-Jörg Vögel** (BMW Group), co-chair  
**Lena Niebauer** (BMW Group)  
**Peter Sommer** (BMW Group)

Contact the organizing team at: [driveme2019@easychair.org](mailto:driveme2019@easychair.org)

# BMW SUMMER SCHOOL 2019.

FINAL PROGRAMME.

## Intelligent Cars on Digital Roads – Frontiers in Machine Intelligence.

Artificial Intelligence: New approaches and chances in urbanization, mobility and society  
 7<sup>th</sup> French-German summer school for PhD candidates and junior scientists.

July 15-July 20, 2019.  
 Fall (Lenggries), Bavaria, Germany.

Chair: M. Würtenberger (BMW Group), Prof. U. Finger (Eurecom), Prof. A. Herkersdorf (TUM)

<http://summerschool.bmw>

Organized by:



In Cooperation with:



Co-funded by:



# PROGRAM.

All speakers and titles are subject to change.

## Sunday, July 14, 2019.

### French National Holiday

First arrivals at conference venue

## Monday, July 15, 2019.

### Plenary Session

10:00 - 11:00 Welcome Addresses

### Plenary Session - Opening Keynote

11:00 - 12:00 Carlo Ratti, Head of MIT Senseable City Lab

### Lunch Break

12:00 - 14:00

### Plenary Session - Trends in Urbanization, Smart Cities and Transport

14:00 - 15:00 Pang Heng Soon, SGIInnovate, Singapore

### Poster Fair

15:30 - 16:30 Poster Pitches

17:00 - 19:00 Apero Poster Fair: see separate program on next page.

### Social

19:30 - 22:00 Cocktails and dinner.

## Tuesday, July 16, 2019.

### Plenary Session – Artificial Intelligence, IoT and Mobility

09:00 - 12:00 Weiyun Jiao, ITSC, Ministry of Transport, P.R.China  
Prof. Arnaud de la Fortelle, Mine ParisTech  
Prof. Jean-François Bruneau, IVADO

### Lunch Break

12:00 - 14:00

### Breakout Sessions

14:00 - 17:00 Parallel interactive workshops in small groups.  
Topics and moderators: see separate program on next page.

# PROGRAM.

All speakers and titles are subject to change.

## Tuesday, July 16, 2019 (contd.).

### Social

18:30 - 20:00 Dinner.

### Fireside Chat

20:00 - 22:30 Dr. Markus Grueneis  
Vice President Production System, Digitalization, Operational  
Excellence, BMW Group

## Wednesday, July 17, 2019.

### Plenary Session – Urban Living, Smart Cities, Mobility

09:00 - 11:00 Toni Cheng, Alibaba  
Ulrich Fastenrath, BMW Group

### Lunch Break

11:00 - 13:00

### Plenary Session – Urban Living, Smart Cities, Mobility

13:00 - 14:00 Prof. Jörg Ott, Computer Science and Prof. Constantinos Antoniou,  
Civil, Geo and Environmental Engineering, TUM

### Midweek Social Event

14:00 - 20:00 Social activities: strolling the nearby forest, stand up paddling on  
nearby lake

### Fireside Chat

20:00 - 22:30 Prof. Jörg Ott and Prof. Constantinos Antoniou, TUM

## Thursday, July 18, 2019.

### Lean Startup Machine

09:00 - 12:00 Sprint 1 – Lean Startup Machine

### Lunch Break

12:00 - 14:00

### Breakout Sessions

14:00 - 17:00 Parallel interactive workshops in small groups.  
Topics and moderators: see separate program.

# PROGRAM.

All speakers and titles are subject to change.

## Thursday, July 18, 2019 (contd.).

### Poster Fair

17:30 - 19:30 Apero Poster Fair: see separate program.

### Social

18:30 - 20:00 Dinner.

## Friday, July 19, 2019.

### Lean Startup Machine

09:00 - 12:00 Sprint 2 - Lean Startup Machine

### Lunch Break

12:00 - 14:00

### Lean Startup Machine

14:00 - 17:00 Sprint 3 - Lean Startup Machine

### Poster Fair

17:30 - 19:30 Apero Poster Fair: see separate program.

### Social

18:30 - 20:00 Farewell Dinner.

## Saturday, July 20, 2019.

### Plenary Session

09:00 - 13:00 Lean Startup Machine: Final Pitches; Closure, Farewell

### The BMW Summer School is organized in three tracks:

#### Keynote/breakout track

Learning from invited speakers presenting their views and research.

#### Poster track

Presentation & discussion of conference submissions.

#### Lean startup machine

Transferrable skills: develop innovative ideas in competitive pitching format.

# BREAKOUT PROGRAM.

**Tuesday, July 16, 2019.**

**Breakout Sessions 14:00 - 17:00 in-depth, thinking out of the box, follow-up discussions on plenary session topics**

Session M2	Jane Vita, Digitalist Group "Introduction to Design Thinking"
Session M3	Oliver Oberst, IBM; Tom Hubregtsen, BMW Group "Quantum Computing Basics"
Session M4	Irina Benkert, BMW Group "Predicting Car-Sharing Demand"

**Thursday, July 18, 2019.**

**Breakout Sessions 14:00 - 17:00 in-depth, thinking out of the box, follow-up discussions on plenary session topics**

Session T6	Jakub Marecek, IBM; Tom Hubregtsen, BMW Group "Quantum Machine Learning"
Session T7	Susanne Müller, Munich School of Philosophy "Human versus AI? Ethical reflections on and frontiers in an unequal relationship."
Session T8	Kyle Hounslow, Digitalist "State of the art in Computer Vision"

# POSTER PROGRAM.

**Monday, July 15, 2019.**

**17:00 - 19:00 Apero Poster Fair**

Shiquan Zhang, Shanghai Jiao Tong University „Corner Aided Tracking with Deep Regression Network“
Ju-Hwan Seo, KAIST "Learning 3D Surface Descriptor Robust to Point Density Changes of Point Cloud Images Using Domain-Adversarial Learning"
Haisheng Su, Shanghai Jiao Tong University "Transferable Knowledge Based Multi-Granularity Fusion Network for Weakly Supervised Temporal Action Detection"
Matthias Zoehrer, Graz University of Technology "Enabling Noise Robust Communication in Today's Vehicle"
Felix Batsch, Coventry University "Tackling the Validation of Autonomous Vehicles with Machine Learning"
Gautam Kishore Shahi, University of Trento "Traffic Warning Prediction"
Dantong Ge, Beijing Institute of Technology "Safety-Guaranteed Path Planning and Control for Future Urban Air Mobility"
Xixie Zhang, TU Berlin "Monitoring Driver Mental States in Autonomous Driving with Brain Signals"
Hongpeng Zhou, Delft University of Technology "BayesNAS: A Bayesian Approach for Neural Architecture Search"
Mahrok Khakzar, Queensland University of Technology "How Can A Predictive Collision Avoidance System be Personalised and Accurate in a Dynamic Traffic Scene?"
Rodrigo Perez, Technical University of Munich "Deep Learning Radar Object Detection"

**Thursday, July 18, 2019.**

**17:30 - 19:30 Apero Poster Fair**

Zahra Zohrevand, Simon Fraser University „AttackTracker: Dynamic Attack Detector Using Distributed Local Detectors“
Muping Zhao, RWTH Aachen University "Public Participatory Networks for AI in Urban Areas"
Mirko D'Angelo, Linnaeus University "Continuous Model-based Engineering of QoS-aware Self-adaptive System"
Fouzia Adjailia, Technical University of Kosice "Towards Emotional Cloud Based Drivers Emotion Assist"

# POSTER PROGRAM.

Citlalli Gamez Serna, Université de Technologie de Belfort-Montbéliard  
"Towards Visual Urban Environment Perception with Monocular Camera for Automated Vehicles"

Michael Gerber, CARRS-Q, Queensland University of Technology  
"Attention Management to Improve Fallback-Readiness in Conditional Automated Vehicles"

Prabhat Hegde, Thayer School of Engineering – Dartmouth College  
"Intelligent Transportation Energy Systems for Massively Electrified Transportation Infrast."

Mohamed Amine Falek, University of Strasbourg  
"Rela-Time Data: Best Practices for Efficient Vehicle Re-routing in Urban Road Networks"

Lara Codeca, Eurecom  
"Multi-modal Activity-based Mobility Generation Applied to Microscopic Traffic Simulations"

Thi Minh Hoa Nguyen, City University of Hong Kong  
"Transit Network Design And Frequency Setting With Two-Stage Genetic Algorithm"

**Friday, July 19, 2019.**

**17:30 – 19:30 Apero Poster Fair**

Xingguo Chen, Leibniz University Hannover  
"Raspberry Pi Robot in Smart Logistics"

Yunpeng Su, University of Canterbury  
"VR/AR enhanced intuitive teleoperation of robotic welding system"

Vera Kurz, Technical University of Munich  
"Road Surface Survey for Ground Truth Generation"

Miloš Viktorović, Eindhoven University of Technology  
"Urban Traffic Data Engineering Using Semantic Web Technologies"

Xin Li, University of California at Berkeley  
"Vehicular Edge Cloud Computing: An Energy Conservation and Computation"

Otto Piramuthu, University of Illinois at Urbana-Champaign  
"Learning Autonomous Vehicle Trajectory Generation"

Zixu Guan, Shanghai Jiao Tong University  
"Wireless BMS based on Bluetooth 5.0"

Duncan Deveaux, Eurecom  
"Reinforcement Learning applied to Parking Optimization with SUMO"

Jose Daniel Alvarez Coello, University of Oldenburg  
"Data architecture for vehicle data semantics and driving context reasoning"

Alexandra Tran, Queensland University of Technology  
"Computer vision verification of Advanced Driver Assistance Systems to secure driver trust"