2023 BMW SUMMER SCHOOL.

INTELLIGENT CARS ON DIGITAL ROADS.

FRONTIERS IN MACHINE INTELLIGENCE.

Highlight Topic: Trust and Safety for Intelligent Algorithms

- Functional Safety and Artificial Intelligence
- Advanced user experience and user interaction
- User acceptance and trust in autonomous systems
- Ethics of intelligent automation, Future of Work, UN SDG
- Latest trends: Generative AI, Quantum Machine Learning, 6G

9th French-German Summer School.

Sofia Antipolis, France – Jul 03 -Jul 08, 2023.

Check for updates: http://summerschool.bmw

2023 BMW SUMMER SCHOOL.
FINAL SCHEDULE.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
09:00	**Welcome & Opening Keynote** Speaker: Prof. Gerhard Kramer (TUM) Prof. David Gesbert (EURECOM)	**Keynote AI in Industry** Speaker: Dr. Peter Lehnert (BMW)	**Safe AI Research** Speaker: Prof. Foutse Khomh (IVADO)	Business Model Canvas Ideation Design Thinking	Lean Startup Machine	Closure, Farewell
10:00	Morning Coffee	Morning Coffee	Morning Coffee			
11:00	**Bringing AI to the real world** Speaker: Prof. Jean-François Bruneau (IVADO) Prof. Raphaël Troncy (Eurecom)	**AI in Mobility & Services** Speaker: Evren Ermis (Continental) Cornelia Schaurecker (Strategic advisor, ex Vodafone Group/Automotive)	**Opportunities in AI** Speaker: Marting Glas (iabg) Yann-Seing Law-Kam Cio (Designbot.tech)	Speaker: EURECOM Startup Studio	Speaker / Coach: EURECOM Startup Studio EURECOM EDHEC Incubator	
12:00						
13:00	Lunch	Lunch	Lunch	Lunch	Lunch	
14:00	**Business & Regulation** Speaker: Dr. Florian Dötzer (TUM Venture Labs) Martin Weiss (Tiptree Systems)	**Quantum ML and Quantum Generative Design** Speaker: Markus Pflitsch (Terraquantum) Prof. Hao Wang (Leiden University) Antonio Andrea Gentile (Pasqal)				
15:00				Lean Startup Machine	Lean Startup Machine	
16:00	Poster Pitches	Coffee Break	Midweek Social Event			
17:00	Coffee Break	Apero Poster Fair:		Apero Poster Fair		
18:00	Apero Poster Fair:					
19:00		Dinner			Dinner	
20:00	Cocktail Reception & Dinner	**Fireside Chat** Speaker: Dr. Peter Lehnert (BMW) & Prof. David Gesbert (Eurecom)	Dinner	Dinner	Lean Startup Machine Pitch Night	

DRAFT PROGRAMME.

■ **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.

2023 BMW SUMMER SCHOOL.
INVITED SPEAKERS.

Confirmed

Peter Dr. Lehnert · 1st
VP Technology and Innovation - E/E Architecture and Digital Car Ex...
Bavaria, Germany
Experience: BMW Group, BMW, and 1 more

David Gesbert · 1st
Director, EURECOM
Biot
3K followers

Gerhard Kramer · 2nd
Professor & Senior Vice President Research and Innovation at Tec...
Bavaria, Germany
Experience: Technical University Munich, Technische Universität
München, and 3 more

Cornelia Schaurecker · 1st [in]
Global Group Director AI & Big Data Vodafone | Advisor | Value cr...
Germany
Experience: Vodafone, Capgemini, and 5 more

Foutse Khomh · 2nd
Canada CIFAR AI Chair at Mila, FRQ-IVADO Research Chair, Full Prof...
Montreal, QC
3K followers
Talks about #ai, #se4ai, #semla, #machinelearning, and
#softwareengineering

Markus Pflitsch · 2nd [in]
Entrepreneur & Investor | Quantum Tech
Zurich
9K followers
Talks about #quantum, #innovation, #entrepreneurship, and
#quantumcomputing

Martin Glas · 2nd
Head of Innovation Colab at IABG
Greater Munich Metropolitan Area
Experience: IABG, Bauhaus Luftfahrt e.V., and 1 more

Yann-Seing Law-Kam Cio · 1st
CEO at DesignBot
Terrebonne, QC
Experience: DesignBot, Centech Mtl, and 3 more

Martin Weiss · 2nd [in]
PhD Candidate at Mila
Montreal, QC
Past: Software Engineer at The Montreal Neurological Institute

Florian Doetzer · 1st
Entrepreneur, Innovator and Independent Advisor
Garching
2K followers
Talks about #startup, #aerospace, #leadership, #entrepreneurship,
and #mentoringmatters

Hao Wang · 2nd
Assistant Professor at LIACS
Leiden
Experience: LIACS, 上海谱时昊唯数据科技有限公司, and 4 more

Evren Ermis · 2nd
Big Data Architect bei Continental
Mannheim
Experience: Continental, ETAS, and 2 more

Antonio Andrea Gentile · 2nd
Senior Quantum Developer @ PASQAL | co-founder @ MRS
Netherlands
Experience: PASQAL, MRS s.r.l., and 5 more

Raphael Troncy · 1st
Associate Professor in Data Science (Knowledge Graphs, Ontologi...
Greater Nice Metropolitan Area
Experience: EURECOM, European Commission, and 6 more

2023 BMW SUMMER SCHOOL. POSTERS.

Dmytro Humeniuk. Reinforcement Learning Assisted Evolutionary Search for Autonomous Systems Testing

Brian Hsuan-Cheng Liao. Dependable AI for Autonomous Driving

Elahe Amiri, Antoine Legrain and Issmaïl El Hallaoui. Online optimization of a dial-and-ride problem with the integral primal simplex

Xiaoxu Chen. Probabilistic forecasting of bus travel time with a Bayesian Gaussian mixture model

Ha Nhi Ngo, Elsy Kaddoum, Jonathan Bonnet, Anaïs Goursolle and Marie-Pierre Gleizes. Generalized Traffic Prediction System using Adaptive Multi-Agent Approach for Different Traffic Levels

Youssef Achari Berrada, Elvira Shishenina and Hans-Joerg Voegel. Quantum AI for Aerodynamics Simulations: Towards Zero-Physical Prototyping

Mert Keser, Gesina Schwalbe and Alois Knoll. Real-time Interpretable Plausibility Verification for 2D Object Detectors Using Domain-Invariant Concept Bottleneck Models

Gabriela de Moraes Beltrão. Cross-Cultural Factors Affecting Trust in Technology

Bernhard Jobst, Carlos A. Riofrío, Elvira Shishenina and Frank Pollmann. Efficient representation of classical data as compressed quantum states for quantum machine learning

Clément Blanco-Volle, Frédéric Migeon, Marie-Pierre Gleizes, Stéphanie Combettes, Nicolas Verstaevel and Michel Povlovitsch Seixas. Contextual Recommended Speed

Ioannis Vondikakis. A Federated Learning Framework for Intelligent Road Surface Classification

Simon Schramm, Ulrich Niklas and Kim Dominique Nebe. Explainable Demand Forecasting: A model agnostic, graph-based approach

Sebastian Schmidt and Stephan Günnemann. Online and Stream-based Active Learning for Autonomous Driving Perception

Muhammad Naeem Tahir, Prof. Marcos Katz and Prof. Ari Pouttu. Advanced Vehicular Communications Through Cellular and Short-Range Networks Exploiting Road Weather and Traffic Observation Data

Giacomo Golluccio. Reinforcement Learning-based Robot Bin-Picking Application in Cluttered Environment: Simulations and Experiments

Felix Fröhling. Diagnosis, Quantification, and Mitigation of Risks to Vulnerable Road Users and other Vehicles Arising from Uncertainties in Sensor Data

Hanadi Alhamdan and Dorothy Monekosso. Driver Behaviour Analysis Using Multiple Data Sources for Improving Road Safety

Kevin Shen, Vedran Dunjko, Hao Wang and Elvira Shishenina. Quantum Generative Modelling in Application to Generative Design

Lara Pörtner. Creation of a customer-specific reference model for achieving optimal data strategies based on maturity analyses: methods and tool

Ali Salamati, Majid Zamani and Ali Salamati. Data-Driven Safety Verification of Stochastic Systems: A Wait-and-Judge Approach

A Wasay Khan. Generative Modeling for Composite Adhesives

Otto Piramuthu. BEV Range Anxiety and Cumulative Prospect Theory

Faisal Hawlader, Francois Robinet and Raphael Frank. Comparing Edge and Cloud for V2X-Based Real-Time Object Detection in Autonomous Driving

Musab Bin Saad Zuberi, Safwan Khan, Asad Ur Rehman, Muhammad Zain Uddin and Faisal Iradat. Cloud Based Vehicular Intrusion Anomaly Detection System, Enhancing Security in Connected Vehicles

Enguerrand Boitel. Empowering Individual Mobility with Blockchain Technology Using AI

Muhammad Zain Uddin and Syed Muhammad Faisal Iradat. A Model for Secure Sharing of Structured Cyber Threat Intelligence in vehicular networks

Carlos Mateo Risma Carletti. Platoon-Local Dynamic Map: Micro cloud support for platooning cooperative perception