Advancing fail-aware, fail-safe, and fail-operational electronic components, systems, and architectures for fully automated driving to make future mobility safer, affordable, and end-user acceptable.

Results

Project Information

AutoDrive

Grant agreement ID: 737469

Funded under
H2020-EU.2.1.1.7.
H2020-EU.2.1.1.

Overall budget
€ 64 569 691,44

EU contribution
€ 16 163 362,92

Coordinated by
INFINEON TECHNOLOGIES AG
Germany

Start date
1 May 2017

End date
31 October 2020

Closed project

Deliverables

Documents, reports (8)

Final report on AutoDrive standardization and technology achievements and future plans (T7.3) [final]
Final report on AutoDrive standardization and technology achievements and future plans Contributing partners: All partners Relevant SCs: SC9

1 of 15
Engineering workshop (T7.1)
Engineering workshop Contributing partners: All partners

Intermediate report on AutoDrive standardization and technology activities and plans (T7.3)
Intermediate report on AutoDrive standardization and technology activities and plans Contributing partners: All partners Relevant SCs: SC9

Final Report on the Dissemination of the Foreground (T7.2)
Final Plan and Report for Dissemination of the Foreground Contributing partners: All partners

Report on project clustering and synergies (T8.5)
Report on project clustering and synergies Contributing partners: TECN, SINTEF

AutoDrive standardization survey on standards involvement, technologies concerned, and plan (T7.3)
AutoDrive standardization survey on standards involvement, technologies concerned, and plan Contributing partners: All partners Relevant SCs: SC9

Pan European collaboration on autonomous vehicles (T7.5)
Pan European collaboration on autonomous vehicles Contributing partners: some partners contribute

End users’ acceptance survey (T7.4)
End users’ acceptance survey Contributing partners: MCC Relevant SCs: SC9

Demonstrators, pilots, prototypes (1)

Hardware-in-the-loop, driving simulator, and systems integrated in vehicle - unit under tests commissioning ready (T6.7)
Hardware-in-the-loop, driving simulator, and systems integrated in vehicle - unit under tests commissioning ready Contributing partners: FM, IFAG, I&M, JAC, KS, POLT, UAH, VIG Relevant SCs: SC3

Other (1)

Project website: AutoDrive WEB portal established and operating
Project website: AutoDrive WEB portal established and operating
A Vehicle Simulation Model and Automated Driving Features Validation for Low-Speed High Automation Applications

Author(s): Jose Angel Matute-Peaspan, Asier Zubizarreta-Pico, Sergio E. Diaz-Briceno
Published in: IEEE Transactions on Intelligent Transportation Systems, Issue IEEE Transactions on Intelligent Transportation Systems (Early Access) 21 July 2020, 2020, Page(s) 1-10, ISSN 1524-9050
DOI: 10.1109/tits.2020.3008318

Machine Ethics

Author(s): Schoitsch Erwin
Published in: Solving Engineering Problems with Machine Learning Research and Society: Machine Ethics, Issue Number 122, July 2020, 2020, Page(s) 4-5, ISSN 0926-4981
DOI: 10.5281/zenodo.4000289

Sensors and Sensing for Intelligent Vehicles

Author(s): David Fernández Llorca, Iván García Daza, Noelia Hernández Parra, Ignacio Parra Alonso
Published in: Sensors, Issue 20/18, 2020, Page(s) 5115, ISSN 1424-8220
DOI: 10.3390/s20185115

Modeling the degradation mechanisms of C6/LiFePO4 batteries

Author(s): Dongjiang Li, Dmitri L. Danilov, Barbara Zwikirsch, Maximilian Fichtner, Yong Yang, Rüdiger-A. Eichel, Peter H.L. Notten
Published in: Journal of Power Sources, Issue 375, 2018, Page(s) 106-117, ISSN 0378-7753
DOI: 10.1016/j.jpowsour.2017.11.049

A Hybrid Vision-Map Method for Urban Road Detection

Author(s): Carlos Fernández, David Fernández-Llorca, Miguel A. Sotelo
Published in: Journal of Advanced Transportation, Issue 2017, 2017, Page(s) 1-21, ISSN 0197-6729
DOI: 10.1155/2017/7090549

Concepts for improved availability and computational power in automated driving

Author(s): Stephanie Grubmüller, Georg Stettinger, Dragan Nešić, Daniel Watzenig
Published in: e & i Elektrotechnik und Informationstechnik, Issue 135/4-5, 2018,
Pedestrian Path, Pose, and Intention Prediction Through Gaussian Process Dynamical Models and Pedestrian Activity Recognition

Author(s): Raul Quintero Minguez, Ignacio Parra Alonso, David Fernandez-Llorca, Miguel Angel Sotelo
Published in: IEEE Transactions on Intelligent Transportation Systems, Issue 20/5, 2019, Page(s) 1803-1814, ISSN 1524-9050
DOI: 10.1109/tits.2018.2836305

An Algebraic Framework for Runtime Verification

Author(s): Stefan Jaksic, Ezio Bartocci, Radu Grosu, Dejan Nickovic
Published in: IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, Issue 37/11, 2018, Page(s) 2233-2243, ISSN 0278-0070
DOI: 10.1109/tcad.2018.2858460

High-Level Interpretation of Urban Road Maps Fusing Deep Learning-Based Pixelwise Scene Segmentation and Digital Navigation Maps

Author(s): Carlos Fernández, Jesús Muñoz-Bulnes, David Fernández-Llorca, Ignacio Parra, Iván García-Daza, Rubén Izquierdo, Miguel Á. Sotelo
Published in: Journal of Advanced Transportation, Issue 2018, 2018, Page(s) 1-15, ISSN 0197-6729
DOI: 10.1155/2018/2096970

Temperature-dependent cycling performance and ageing mechanisms of C6/LiNi 1/3 Mn 1/3 Co 1/3 O2 batteries

Author(s): Dongjiang Li, Hu Li, Dmitri Danilov, Lu Gao, Jiang Zhou, Rüdiger-A. Eichel, Yong Yang, Peter H.L. Notten
Published in: Journal of Power Sources, Issue 396, 2018, Page(s) 444-452, ISSN 0378-7753
DOI: 10.1016/j.jpowsour.2018.06.035

A review on various temperature-indication methods for Li-ion batteries

Author(s): L.H.J. Raijmakers, D.L. Danilov, R.-A. Eichel, P.H.L. Notten
Published in: Applied Energy, Issue 240, 2019, Page(s) 918-945, ISSN 0306-2619
DOI: 10.1016/j.apenergy.2019.02.078

Modeling of all-solid-state thin-film Li-ion batteries: Accuracy improvement

Author(s): Namdar Kazemi, Dmitri L. Danilov, Lucas Haverkate, Nancy J. Dudney, Sandeep Unnikrishnan, Peter H.L. Notten
Published in: Solid State Ionics, Issue 334, 2019, Page(s) 111-116, ISSN 0038-1101
DOI: 10.1016/j.ssi.2017.10.015
Degradation mechanisms of C6/LiNi0.5Mn0.3Co0.2O2 Li-ion batteries unraveled by non-destructive and post-mortem methods

Author(s): Dongjiang Li, Hu Li, Dmitri L. Danilov, Lu Gao, Xiaoxuan Chen, Zhongru Zhang, Jiang Zhou, Rüdiger-A. Eichel, Yong Yang, Peter H.L. Notten
Published in: Journal of Power Sources, Issue 416, 2019, Page(s) 163-174, ISSN 0378-7753
DOI: 10.1016/j.jpowsour.2019.01.083

Hardware-in-the-Loop Platform for Assessing Battery State Estimators in Electric Vehicles

Author(s): Rocco Morello, Roberto Di Rienzo, Roberto Roncella, Roberto Saletti, Federico Baronti
Published in: IEEE Access, Issue 6, 2018, Page(s) 68210-68220, ISSN 2169-3536
DOI: 10.1109/access.2018.2879785

Rough Set Based Method for Vehicle Collision Risk Assessment Through Inferring Driver’s Braking Actions in Near-Crash Situations

Author(s): Liqun Peng, Miguel Angel Sotelo, Yi He, Yunfei Ai, Zhixiong Li
Published in: IEEE Intelligent Transportation Systems Magazine, Issue 11/2, 2019, Page(s) 54-69, ISSN 1939-1390
DOI: 10.1109/mits.2019.2903539

Experimental Validation of a Kinematic Bicycle Model Predictive Control with Lateral Acceleration Consideration

Author(s): Jose A. Matute, Mauricio Marcano, Sergio Diaz, Joshue Perez
Published in: IFAC-PapersOnLine, Issue 52/8, 2019, Page(s) 289-294, ISSN 2405-8963
DOI: 10.1016/j.ifacol.2019.08.085

Double three-phase PMSM structures for fail operational control

Author(s): M. Kozovsky, P. Blaha
Published in: IFAC-PapersOnLine, Issue 52/27, 2019, Page(s) 1-6, ISSN 2405-8963
DOI: 10.1016/j.ifacol.2019.12.733

Ontology-based test generation for automated and autonomous driving functions

Author(s): Yihao Li, Jianbo Tao, Franz Wotawa
Published in: Information and Software Technology, Issue 117, 2020, Page(s) 106200, ISSN 0950-5849
DOI: 10.1016/j.infsof.2019.106200
A Fail-Operational Control Architecture Approach and Dead-Reckoning Strategy in Case of Positioning Failures

Author(s): Jose Angel Matute-Peaspan, Joshue Perez, Asier Zubizarreta
Published in: Sensors, Issue 20/2, 2020, Page(s) 442, ISSN 1424-8220
DOI: 10.3390/s20020442

An empirical survey on co-simulation: Promising standards, challenges and research needs

Author(s): G. Schweiger, C. Gomes, G. Engel, I. Hafner, J. Schoeggl, A. Posch, T. Nouidui
Published in: Simulation Modelling Practice and Theory, Issue 95, 2019, Page(s) 148-163, ISSN 1569-190X
DOI: 10.1016/J.SIMPAT.2019.05.001

Urban Motion Planning Framework Based on N-Bézier Curves Considering Comfort and Safety

Author(s): Ray Lattarulo, Leonardo González, Enrique Martí, José Matute, Mauricio Marcano, Joshue Pérez
Published in: Journal of Advanced Transportation, Issue 2018, 2018, Page(s) 1-13, ISSN 0197-6729
DOI: 10.1155/2018/6060924

Pedestrian Collision Avoidance System for Autonomous Vehicles

Author(s): Markus Schratter, Michael Hartmann, Daniel Watzenig
Published in: SAE International Journal of Connected and Automated Vehicles, Issue 2/4, 2019, ISSN 2574-075X
DOI: 10.4271/12-02-04-0021

Conference proceedings (43)

A Hybrid Timestamping Approach for Multi-Sensor Perception Systems

Author(s): Josef Steinbaeck, Christian Steger, Eugen Brenner, Norbert Druml
Published in: 2020 23rd Euromicro Conference on Digital System Design (DSD), 2020, Page(s) 447-454
DOI: 10.1109/dsd51259.2020.00077

TOWARDS A RESILIENT SOCIETY – TECHNOLOGY 5.0, RISKS AND ETHICS

Author(s): Erwin Schoitsch
Published in: IDIMT-2020 Digitalized Economy, Society and Information Management, Issue 28th Interdisciplinary Information Management Talks, 2020, Page(s) 403 - 412
DOI: 10.5281/zenodo.4000985
Power antifuse device to bypass or turn-off battery cells in safety-critical and fail-operational systems

Author(s): V. R. H. Lorentz, R. Waller, S. Waldhor, M. Wenger, M. Gepp, R. Schwarz, S. Koffel, S. Wacker, M. Akdere, M. Giegerich, M. Marz
Published in: 2018 IEEE International Conference on Industrial Electronics for Sustainable Energy Systems (IESES), 2018, Page(s) 56-61
DOI: 10.1109/ieses.2018.8349850

Characterization of damper-to-damper wireless channel in small cars

Author(s): Carlos A.M. Costa, Miguel Dheans, Peter Baltus, Hao Gao
Published in: 2018 IEEE MTT-S International Wireless Symposium (IWS), 2018, Page(s) 1-3
DOI: 10.1109/ieee-iws.2018.8401014

A CMOS 79GHz PMCW Radar Soc

Author(s): Marc Ingels
Published in: European Microwave Week, 2018

Using Ontologies for Test Suites Generation for Automated and Autonomous Driving Functions

Author(s): Florian Klueck, Yihao Li, Mihai Nica, Jianbo Tao, Franz Wotawa
Published in: 2018 IEEE International Symposium on Software Reliability Engineering Workshops (ISSREW), 2018, Page(s) 118-123
DOI: 10.1109/issrew.2018.00-20

From Ontologies to Input Models for Combinatorial Testing

Author(s): Franz Wotawa and Yihao Li
Published in: Proceedings of the IFIP International Conference on Testing Software and Systems (ICTSS 2018), Issue 30th, 2018, Page(s) 16

Chip/Package/Board Co-Simulation Methodology for Crosstalk between DC/DC Converter and ADC Input Channels

Author(s): Francesco Settino, Thomas Brandtner, Volha Subotskaya, Antonio Levanto, Marco Faricelli, Frank Praemassing, Luca Della Ricca, Harald Koffler, Pierpaolo Palestri, Felice Crupi
Published in: 2018 7th Electronic System-Integration Technology Conference (ESTC), 2018, Page(s) 1-4
DOI: 10.1109/estc.2018.8546338

Experience Report: Lightweight Implementation of a Controller Area Network to Ethernet Gateway

Author(s): Florian Pölzbauer, Allan Tengg
Published in: 25th IEEE Real-Time and Embedded Technology and
Pedestrian Collision Avoidance System for Scenarios with Occlusions

Author(s): Markus Schratter, Maxime Bouton, Mykel J. Kochenderfer, Daniel Watzenig
Published in: 2019 IEEE Intelligent Vehicles Symposium (IV), 2019, Page(s) 1054-1060
DOI: 10.1109/ivs.2019.8814076

Fully Integrated Tunable Wideband True Time Delay for Wireless Sensor Networks

Author(s): Carlos A. M. Costa, Chu Wang, Kuangyuan Ying, Zhe Chen, Miguel Dhaens, Hao Gao, Peter Baltus
Published in: 2019 IEEE International Symposium on Circuits and Systems (ISCAS), 2019, Page(s) 1-5
DOI: 10.1109/iscas.2019.8702726

Semi-Automatic High-Accuracy Labelling Tool for Multi-Modal Long-Range Sensor Dataset

Author(s): R. Izquierdo, I. Parra, C. Salinas, D. Fernandez-Llorca, M. A. Sotelo
Published in: 2018 IEEE Intelligent Vehicles Symposium (IV), 2018, Page(s) 1786-1791
DOI: 10.1109/ivs.2018.8500672

Safe Stop Trajectory Planning for Highly Automated Vehicles: An Optimal Control Problem Formulation

Author(s): Lars Svensson, Lola Masson, Naveen Mohan, Erik Ward, Anna Pernestal Brenden, Lei Feng, Martin Torngren
Published in: 2018 IEEE Intelligent Vehicles Symposium (IV), 2018, Page(s) 517-522
DOI: 10.1109/ivs.2018.8500536

Architecting Safety Supervisors for High Levels of Automated Driving

Author(s): Martin Torngren, Xinhai Zhang, Naveen Mohan, Matthias Becker, Lars Svensson, Xin Tao, De-Jiu Chen, Jonas Westman
Published in: 2018 21st International Conference on Intelligent Transportation Systems (ITSC), 2018, Page(s) 1721-1728
DOI: 10.1109/itsc.2018.8569945

Highly efficient SiC inverter for aircraft application with innovative thermal management

Author(s): Christian Bentheimer1, Albanik Islami1, Sandra Mainusch1, Florian Hilpert1, Bernd Eckardt1
Published in: 2019
AD-EYE: A Co-Simulation Platform for Early Verification of Functional Safety Concepts

Author(s): Naveen Mohan, Martin Törngren
Published in: SAE Technical Paper Series, 2019
DOI: 10.4271/2019-01-0126

Smooth Reconfiguration for Fault Tolerant Lateral Control of a Vehicle

Author(s): Seshan Ramanathan Venkita; Ellen van Nunen
Published in: 2019

Combining Combinatorial Testing and Metamorphic Testing for Testing a Logic-Based Non-monotonic Reasoning System

Author(s): Franz Wotawa
Published in: 2018 IEEE International Conference on Software Testing, Verification and Validation Workshops (ICSTW), 2018, Page(s) 348-351
DOI: 10.1109/icstw.2018.00071

Mixed-Signal Transmitter Leakage Cancellation for PMCW MIMO Radar

Author(s): Marc Bauduin, Andre Bourdoux
Published in: 2018 15th European Radar Conference (EuRAD), 2018, Page(s) 293-296
DOI: 10.23919/eurad.2018.8546652

WiFi-based urban localisation using CNNs

Author(s): N. Hernandez, H. Corrales, I. Parra, M. Rentero, D. F. Llorca, M.A. Sotelo
Published in: 2019 IEEE Intelligent Transportation Systems Conference (ITSC), 2019, Page(s) 1270-1275
DOI: 10.1109/itsc.2019.8917290

Performance analysis of Vehicle-to-Vehicle communications for critical tasks in autonomous driving

Author(s): I. Parra, H. Corrales, N. Hernandez, S. Vigre, D.F. Llorca, M. A. Sotelo
Published in: 2019 IEEE Intelligent Transportation Systems Conference (ITSC), 2019, Page(s) 195-200
DOI: 10.1109/itsc.2019.8917302

A Comparison of AI-Based Throughput Prediction for Cellular Vehicle-To-Server Communication

Author(s): Josef Schmid, Mathias Schneider, Alfred Hos, Bjorn Schuller
Published in: 2019 15th International Wireless Communications & Mobile Computing Conference (IWCMC), Issue A Comparison of AI-Based Throughput Prediction for Cellular Vehicle-To-Server Communication, 2019, Page(s) 471-476
DOI: 10.1109/iwcmc.2019.8766567
Context-Aware Sensor Adaption of a Radar and Time-of-Flight Based Perception Platform

**Author(s):** J. Steinbaeck, A. Strasser, C. Steger, E. Brenner, G. Holweg, and N. Druml

**Published in:** IEEE Sensors Applications Symposium (SAS), Issue Proceedings, Sensors Applications Symposium (SAS), 2019 IEEE, 2020

Fault-Tolerant Controller and Failure Analysis of Automotive Electromagnetic Suspension Systems

**Author(s):** D. V. Retianza, J. v. Duivenbode, H. Huisman, E. A. Lomonova

**Published in:** 2019 Fourteenth International Conference on Ecological Vehicles and Renewable Energies (EVER), 2019, Page(s) 1-9

**DOI:** 10.1109/ever.2019.8813514

On Trade-offs Between Computational Complexity and Accuracy of Electrochemistry-based Battery Models

**Author(s):** Z. Khalik, H.J. Bergveld, M.C.F. Donkers

**Published in:** 2019 IEEE 58th Conference on Decision and Control (CDC), 2019, Page(s) 7740-7745

**DOI:** 10.1109/cdc40024.2019.9029977

Package Design Methodology for Crosstalk Mitigation between DC/DC Converter and ADC Analog Inputs in Complex SoC

**Author(s):** Francesco Settino, Thomas Brandtner, Josef Niederl, Frank Praemassing, Harald Koffler, Pierpaolo Palestri, Felice Crupi

**Published in:** 2019 IEEE 23rd Workshop on Signal and Power Integrity (SPI), 2019, Page(s) 1-4

**DOI:** 10.1109/sapiw.2019.8781666

RailSem19: A Dataset for Semantic Rail Scene Understanding

**Author(s):** Oliver Zendel, Markus Murschitz, Marcel Zeilinger, Daniel Steininger, Sara Abbasi, Csaba Beleznai

**Published in:** 2019 IEEE/CVF Conference on Computer Vision and Pattern Recognition Workshops (CVPRW), 2019, Page(s) 1221-1229

**DOI:** 10.1109/cvprw.2019.00161

Adaptive Trajectory Planning and optimization at Limits of Handling

**Author(s):** Lars Svensson, Monimoy Bujarbaruah, Nitin R. Kapania, Martin Torngren

**Published in:** 2019 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), 2019, Page(s) 3942-3948

**DOI:** 10.1109/iros40897.2019.8967679

On the Industrial Application of Combinatorial Testing for Autonomous Driving Functions
Author(s): Jianbo Tao, Yihao Li, Franz Wotawa, Hermann Felbinger, Mihai Nica
Published in: 2019 IEEE International Conference on Software Testing, Verification and Validation Workshops (ICSTW), 2019, Page(s) 234-240
DOI: 10.1109/icstw.2019.00058

The PREVENTION dataset: a novel benchmark for PRediction of VEHicles iNTentIONs
Author(s): R. Izquierdo, A. Quintanar, I. Parra, D. Fernandez-Llorca, M. A. Sotelo
Published in: 2019 IEEE Intelligent Transportation Systems Conference (ITSC), 2019, Page(s) 3114-3121
DOI: 10.1109/itsc.2019.8917433

Lines to Planes Registration
Author(s): Ales Jelinek, Adam Ligocki
Published in: 2019

Fault detection and isolation system for four-wheels drive electric vehicles
Author(s): Boulaid Boulkroune, Sebastiaan van Aalst, Ellen van Nunen, Yoann Descas
Published in: 2019 4th Conference on Control and Fault Tolerant Systems (SysTol), 2019, Page(s) 110-116
DOI: 10.1109/systol.2019.8864749

Fault-tolerant environmental perception architecture for robust automated driving
Author(s): Stephanie Grubmuller, Georg Stettinger, Miguel Angel Sotelo, Daniel Watzenig
Published in: 2019 IEEE International Conference on Connected Vehicles and Expo (ICCVE), 2019, Page(s) 1-6
DOI: 10.1109/iccv45908.2019.8965112

Development of a Scenario Simulation Platform to Support Autonomous Driving Verification
Author(s): Christoph Pilz, Gerald Steinbauer, Markus Schratter, Daniel Watzenig
Published in: 2019 IEEE International Conference on Connected Vehicles and Expo (ICCVE), 2019, Page(s) 1-7
DOI: 10.1109/iccv45908.2019.8964914

Identification of performance limitations of sensing technologies for automated driving
Author(s): Helmut Martin, Bernhard Winkler, Stephanie Grubmuller, Daniel Watzenig
Published in: 2019 IEEE International Conference on Connected Vehicles and Expo (ICCVE), 2019, Page(s) 1-6
DOI: 10.1109/iccv45908.2019.8965181

Smart Systems Everywhere – how much Smartness is tolerable?
Author(s): Erwin, Schoitsch
Published in: Proceedings IDIMT 2017, Trauner Verlag, Linz, Austria, pp. 433 (978-3-99062-119-6), Issue 25, 2017, Page(s) pp. 433
DOI: 10.5281/zenodo.1043960

Smart Systems Everywhere – Intelligence, Autonomy, Technology and Society

Author(s): Erwin, Schoitsch
Published in: IDIMT-2018 Strategic Modeling in Management, Economy and Society 26th Interdisciplinary Information Management Talks, Issue 26, 2018, Page(s) 153-155
DOI: 10.5281/zenodo.2590949

BEYOND SMART SYSTEMS – CREATING A SOCIETY OF THE FUTURE (5.0) RESOLVING DISRUPTIVE CHANGES AND SOCIAL CHALLENGES

Author(s): Schoitsch, Erwin
DOI: 10.5281/zenodo.3605685

Longitudinal Model Predictive Control with comfortable speed planner

Author(s): Jose A. Matute, Mauricio Marcano, Asier Zubizarreta, Joshue Perez
Published in: 2018 IEEE International Conference on Autonomous Robot Systems and Competitions (ICARSC), 2018, Page(s) 60-64
DOI: 10.1109/icarsc.2018.8374161

Design and operation of a fail-operational 5kW 800V-12V DC-DC converter

Author(s): F. Bertino, D. de Simone, L. Piegari
Published in: 2019 21st European Conference on Power Electronics and Applications (EPE ‘19 ECCE Europe), 2019, Page(s) P.1-P.10
DOI: 10.23919/EPE.2019.8915502

On registration of vector maps with known correspondences

Author(s): Ales Jelinek
Published in: 2018 ELEKTRO, 2018, Page(s) 1-6
DOI: 10.1109/ELEKTRO.2018.8398367

Are Consumers Ready to Adopt Highly Automated Passenger Vehicles? Results from a Cross-national Survey in Europe

Author(s): Ilias Panagiotopoulos, George Dimitrakopoulos, Gabrielė Keraitė, Urte Steikuniene
Published in: Proceedings of the 6th International Conference on Vehicle Technology and Intelligent Transport Systems, 2020, Page(s) 473-480
DOI: 10.5220/0009398804730480
Towards a Resilient Society – Technology 5.0, Risks and Ethics

Author(s): Schoitsch Erwin
Published in: IDIMT 2020, Proceedings, Issue 49 Schriftenreihe Informatik, 2020, Page(s) pp. 403 - 412
DOI: 10.5281/zenodo.4000984

Thesis dissertations (2)

COPPER THERMOCOMPRESSION FOR MEMS ENCAPSULATION
Author(s): Henri Ailas
Published in: 2019

Sensory Fusion for 3D Dynamic Mapping Thesis
Author(s): Adam Ligocki
Published in: 2020

Book chapters (5)

Reasoning from First Principles for Self-adaptive and Autonomous Systems
Author(s): Franz Wotawa
Published in: Predictive Maintenance in Dynamic Systems - Advanced Methods, Decision Support Tools and Real-World Applications, 2019, Page(s) 427-460
DOI: 10.1007/978-3-030-05645-2_15

WildDash - Creating Hazard-Aware Benchmarks
Author(s): Oliver Zendel, Katrin Honauer, Markus Murschitz, Daniel Steininger, Gustavo Fernández Domínguez
DOI: 10.1007/978-3-030-01231-1_25

Mutation Testing with Hyperproperties
Author(s): Andreas Fellner, Mitra Tabaei Befrouei, Georg Weissenbacher
Published in: Software Engineering and Formal Methods - 17th International Conference, SEFM 2019, Oslo, Norway, September 18–20, 2019, Proceedings, Issue 11724, 2019, Page(s) 203-221
DOI: 10.1007/978-3-030-30446-1_11
A Rule-Based Smart Control for Fail-Operational Systems

**Author(s):** Georg Engel, Gerald Schweiger, Franz Wotawa, Martin Zimmermann  
**Published in:** Advances and Trends in Artificial Intelligence. From Theory to Practice - 32nd International Conference on Industrial, Engineering and Other Applications of Applied Intelligent Systems, IEA/AIE 2019, Graz, Austria, July 9-11, 2019, Proceedings, Issue 11606, 2019, Page(s) 137-145  
**DOI:** 10.1007/978-3-030-22999-3_13

From Ontologies to Input Models for Combinatorial Testing

**Author(s):** Franz Wotawa, Yihao Li  
**Published in:** Testing Software and Systems - 30th IFIP WG 6.1 International Conference, ICTSS 2018, Cádiz, Spain, October 1-3, 2018, Proceedings, Issue 11146, 2018, Page(s) 155-170  
**DOI:** 10.1007/978-3-319-99927-2_14

Brno Urban Dataset - The New Data for Self-Driving Agents and Mapping Tasks

**Author(s):** Adam Ligocki, Aleš Jelnek, Luděk Zalud  
**Published in:** 2019

Guaranteed safety upon sensor failure Flanders Make develops algorithms for autonomous vehicles

**Author(s):** Ellen Van Nuner  
**Published in:** Bits&Chips 6, 35-36p, Issue Bits&Chips 6, 35-36p, 2018, Page(s) 35-36

Sicherheitsprobleme und herausforderungen beim autonomen Fahren

**Author(s):** Nicholas Jäger Prof. Dr. Andreas Aßmuth  
**Published in:** 'Forschungsbericht 2019' annual university research highlights report, Issue 2019, 2019, Page(s) 47-54, ISSN 2365-1997

Datasets