

TrustRobotics Challenge:

Safe & Secure Robotic Systems in Action

Chair: Ionela Prodan

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The TrustRobotics Challenge of CSAW'25 Europe (<https://esisar.grenoble-inp.fr/en/research/csaw>) is a competition dedicated to highlight innovative and impactful research in the field of safe and secure robotics. This unique initiative invites Master, PhD students and postdocs researchers from academia and industrial R&D labs across Europe to present their work, with a strong emphasis on demonstrable safety, resilience and trust in robotic systems. This year's 11 finalists will be evaluated by a panel of industrial and academic experts, focusing on how well their research resonates with industry and its practical relevance.



Adelina Giurea

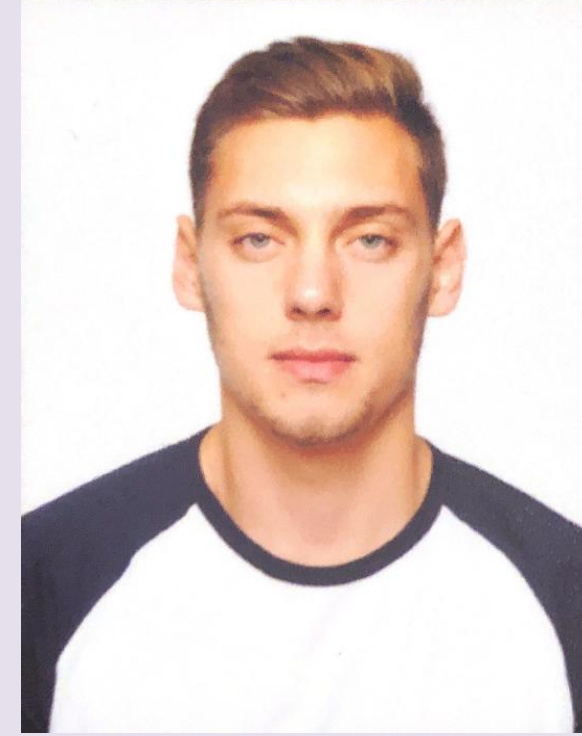


BELGIUM
Ghent University,
Internet Technology
and Data Science Lab

Integration of UWB Radar in Mobile Robots for Continuous Obstacle and Environment Mapping



Georgi Georgiev



BULGARIA
University of Chemical
Technology and Metallurgy

Safe Use of KUKA KR300 Industrial Robot in Electric Arc Furnace Operation



Nicola D'ambrosio



ITALY
University of Naples
Federico II
Dept. of Electrical Engineering and
Information Technology

Bridging Safety and Security: From Legacy Systems to Modular Cyber-Resilient Architectures in Aerospace



Zhen Zhang



GERMANY
Technical University of Munich,
School of Computation, Information
and Technology

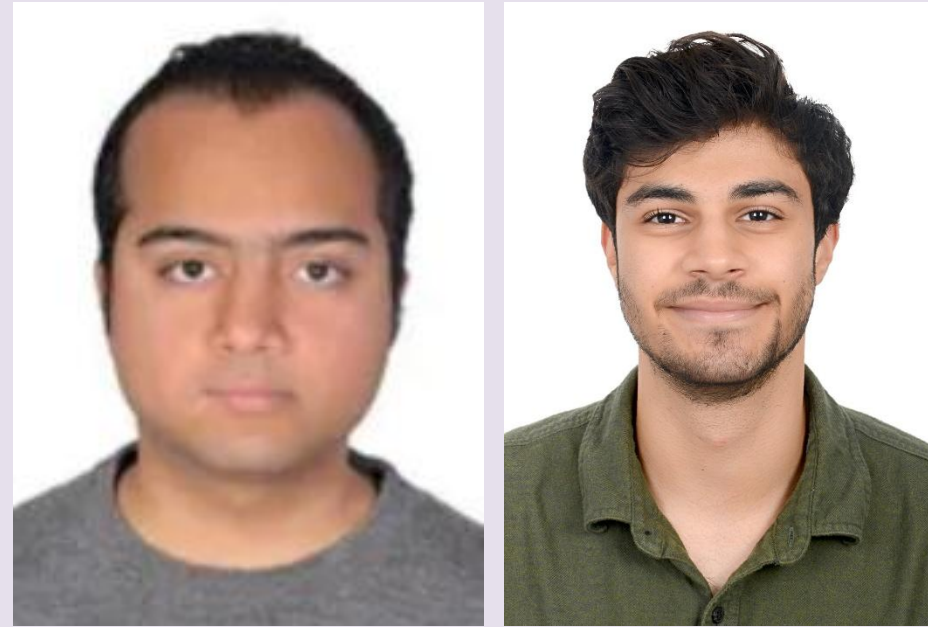
Data-Driven Nonconvex Reachability Analysis Using Exact Multiplication for Safety-Critical Applications

Ahmad Hafez Amr Hegazy



GERMANY
Technical University
of Munich,
School of Computation, Information and
Technology

Safe LLM-Controlled Robots with Formal Guarantees via Reachability Analysis



University of
Zagreb

Luka Siktar Banimir Caran



CROATIA
Faculty of Mechanical
Engineering and Naval
Architecture,
University of Zagreb

Project ROBOCAMP: Aerial Robotics for Autonomous Search and Rescue in Tourist Camps



Hung Truong Trang Nguyen Rares Zamfir



FRANCE,
LCIS - Grenoble INP,
University Grenoble
Alpes
ROMANIA, Univ. Politehnica of Bucharest

B-Spline-Based SLAM for Safe Exploration and Navigation of Ground Robots Equipped with LiDAR



Luca Tarasi



ITALY
University of Genoa
DIBRIS

COLREGs-Compliant Navigation Framework for Autonomous Surface Vehicles Using LiDAR and RGB Data Fusion

Mohammad Reza Ranjbar Divkoti



PORTUGAL
Faculty of Engineering,
University of Porto

Dynamic Obstacle Avoidance and Motion Planning for UAV with Low-Cost Sensors Using Deep Reinforcement Learning and a Behavior Grid Map with Minimal Sensing



Vlad Angheluta



ROMANIA
University Politehnica
of Bucharest, Faculty of Automation
and Computer Science

Safe control for leader-follower formations of Aerial Drones



Cong Khanh Dinh



FRANCE
LCIS - Grenoble INP,
University Grenoble Alpes

Distributed Evolutionary Dynamics Formation Control and Reconfiguration for Nanodrones

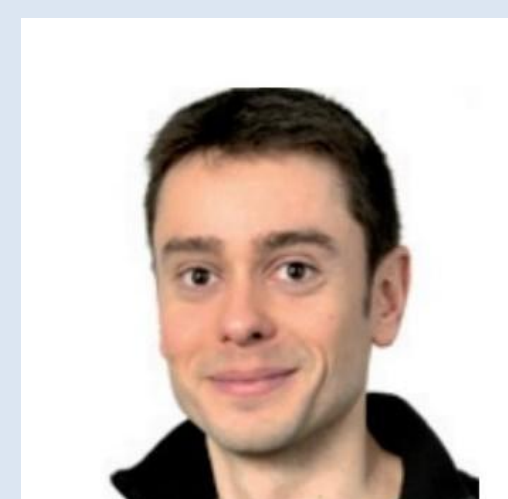
JURY MEMBERS



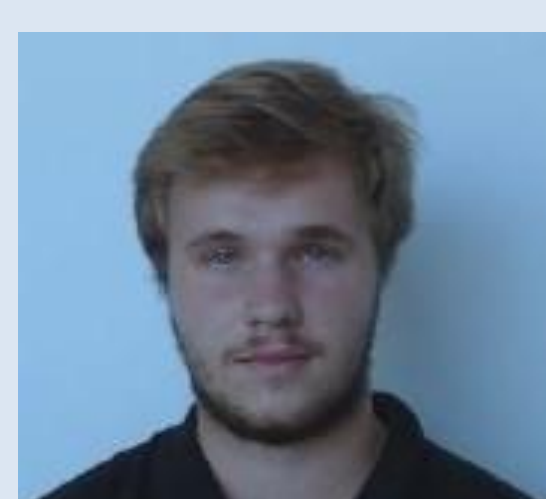
Mata Khalili, PhD.
Robotics Research Scientist,
Nokia Bell Labs



Warody Lombardi, PhD.
Inertial navigation engineer,
Thales



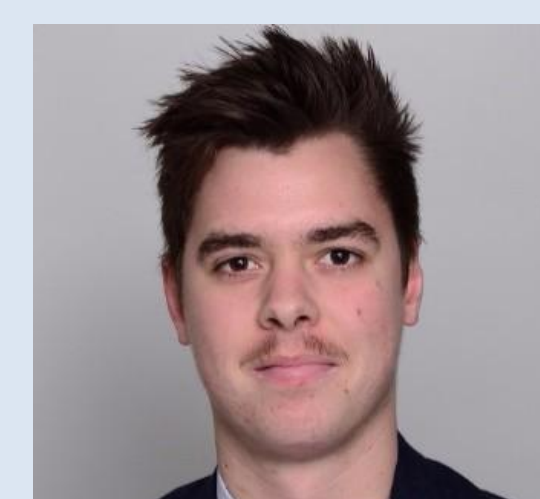
Sylvain Bertrand, PhD.
Senior Research Scientist
ONERA - The French
Aerospace Lab



Vincent Marguet, PhD.
Control engineer,
SurveyCopter,



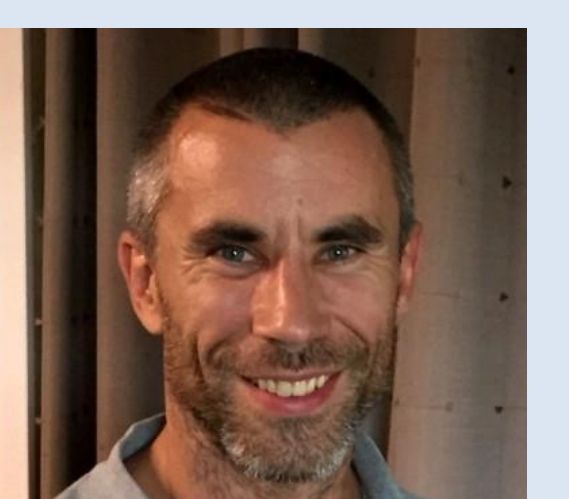
Lucas Paillet
Control Engineer,
Safran Electronics &
Defense



Louis Morge-Rollet, PhD.
Associate Prof. in
Embedded Systems,
LCIS - Grenoble INP



Yoann Hervagault, PhD.
Embedded electronics
engineer, Actia 3E



Christophe Gauthier, PhD.
Systems Chief Engineer,
Volvo Trucks

Finalists' presentations and demonstrations: November 14, 2025, starting with 8:15 a.m. in room A049 at Esisar-Grenoble INP, Address: Grenoble INP-Esisar, UGA, 50 rue Barthélémy Laffemas, 26000 Valence
To attend the presentations, registration is mandatory at the following link: [Link for subscription](#)

For further information please contact the Chair of the Competition, Assoc. Prof. Ionela Prodan (ionela.prodan@lcis.grenoble-inp.fr)

