

Intelligence-based Cybersecurity for Cooperative, Connected and Automated Mobility (CCAM)

European Commission funded project CARMEL addresses the cybersecurity challenge of the next generation mobility, contributing to the long-term vision of safer roads with zero fatality.

By the CARMEL Consortium
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CARMEL (Artificial Intelligence-based Cybersecurity for Connected and Automated Vehicles), is a € 6.6 million project launched on the 1st October 2019, aiming to improve road safety in future mobility scenarios. It considers the cybersecurity related issues of the CCAM ecosystem, considering three novel types of mobility: i) autonomous cars, ii) connected vehicles empowered by next generation communication systems, and iii) electromobility. The project applies a proactive method based on AI and ML techniques to mitigate cybersecurity-originated safety risks on roads. Considering the entire supply chain, CARMEL aims to introduce innovative anti-hacking intrusion detection/ prevention systems for the European automotive industry. CARMEL pilot demonstrations will take place in two premises: at the Test Area in Baden-Württemberg in Germany and at GreenFlux R&D laboratory in the Netherlands where real-world scenarios will be performed with prototype vehicles and smart chargers, under the safety offered by a controlled environment.

The 30-month initiative, which has received close to € 4.9 million contribution from the European Commission, is coordinated by the Fundació i2CAT, a non-profit research and innovation centre located in Barcelona, Spain. Dr. Pouria Sayyad Khodashenas, senior researcher and innovation strategy manager, with 12 years of experience in ICT sector will be the coordinator of CARMEL. Mr. Peter Hofmann from T-Systems/Telekom security in Germany, with 20 years of experience in the areas of mobile security, automotive security and integration of hardware security in applications will be the technical manager of the project. Dr. Ioannis Giannoulakis, co-founder and principal analyst in Eight Bells Ltd., an SME located in Nicosia, Cyprus, will play the role of CARMEL exploitation and innovation manager.

CARMEL in line with the European Union prioritize cybersecurity public private partnership (cPPP) brings together 15 organizations from 8 European countries with complementary expertise and skills. CARMEL partners are, Austria: AVL; Cyprus: The University of Cyprus, 8BELLS, Sidroco; Germany: Altran, Panasonic Automotive, T-Systems; Greece: The University of Patras; Netherlands: GreenFlux, Cyberlens; Portugal: Ubiwhere; Spain: i2CAT, Ficosa, Atos; UK: 0 Infinity.

The consortium aims to contribute to the consolidation of Europe's leading role on CCAM arena, paving the way for boosting the European innovation capacity and creating new market opportunities.

Find out more at <https://www.h2020caramel.eu>

Contact

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Useful Links

- Project website: <https://www.h2020caramel.eu>
- Twitter: @caramel_project
- LinkedIn: H2020 Caramel Project

