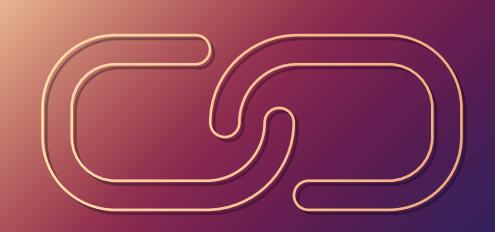
NEWSLETTER





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EDITORIA!

Given the nature of the project as a Research & Innovation Action with an important validation / demonstration component, the consortium does not aim to redevelop novel technologies completely from scratch, but instead, to use existing technologies, improve them and combine them into an innovative and integrated border control solution. Thus, the consortium partners are oriented towards creating innovation both in areas such as **Data processing**, **Fusion** and Interpretation, as well as and on hardware such as Acoustic Cameras, SAR, SWIR/LWIR. With this special issue of the BorderUAS newsletter series, there is a list of all scientific papers published within the time span of the project so far on sensors, video analytics, data mapping and many more. Check them out below and click the <u>links</u> () to have access to more information.

PUBLICATIONS

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1. Design of Sensors' Technical Specifications for Airborne Surveillance at Borders, Journal of Defence & Security Technologies, 2022

Authors: Giorgos Kampas; Aggelos Vasileiou; Marios Antonakakis; Michalis Zervakis; Emmanouil G. Spanakis; Vangelis Sakkalis; Peter Leškovský; Sergio Sanchez Carballido; Razvan Gliga; Dejan Vinković; Bojan Pečnik Partners involved KEMEA | TUC | FORTH | VICOM | HSF | SIMAVI

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2. I-PRIDe: Video-based Person Re-Identification, 2022 IEEE International Conference on Imaging Systems and Techniques (IST)

Authors: J. Yang, P. Leškovský, A. Cortes, J. García and O. Otaegui

Partners involved: VICOM

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3. BUAS: A Knowledge-based Representation of the Border Surveillance Domain, 2022 IEEE International Conference on Imaging Systems and Techniques (IST)

Authors: I. Kontopodis, F. J. Iriarte, P. Leškovský, J. García and O. Otaegui

Partners Involved: VICOM

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4. Acoustic Sensor for Far-Field Sound Source

Detection, The 6th International Acoustics and Audio Engineering Conference, as part of International competition of audio recordings - TAKTONS 2022

Authors: Dejan Todorović, Iva Salom **Partners Involved:** DIRACS, IMP

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5. V2F: Real Time Video Segmentation with Apache

Flink, 17th International Symposium on Visual Computing (ISVC), 2022

Authors: Dimitrios Kastrinakis, Euripides G.M., Petrakis

Partners Involved: TUC

PUBLICATIONS



6. <u>Ultra-sensitive graphene membranes for microphone applications</u>, Nanoscale, 2023

Authors: Baglioni, G.; Pezone, R.; Vollebregt, S.; Cvetanović Zobenica, K.;Spasenović, M.; Todorović, D.; Liu, H.; Verbiest, G. J.; van der Zant, H. S. J.; Steeneken, P. G.

Partners Involved: DIRACS



7. Real-Time Object Detection using an Ultra-High-Resolution Camera on Embedded

Systems, 2022 IEEE International Conference on Imaging Systems and Techniques (IST 2022)

Authors: Marios Antonakakis, Aimilios Tzavaras, Konstantinos Tsakos, Emmanouil G. Spanakis, Vangelis Sakkalis, Michalis Zervakis, Euripides G.M. Petrakis

Partner involved: TUC



8. Heatmap-based Explanation of YOLOv5 Object Detection with Layer-wise Relevance Propagation, 2022 IEEE International Conference on Imaging Systems and Techniques (IST 2022)

Authors: Apostolos Karasmanoglou, Marios Antonakakis, Michalis Zervakis

Partner involved: TUC



9. Nexus: Proxy Service for the Web of Things, 37th International Conference on Advanced Information Networking and Applications (AINA 2023), Juiz de Fora, Brazil, March 29-31, 2023,

Authors: Isidoros Paterakis and Euripides G.M. Petrakis

Partner involved: TUC

CONTACT

If you are interested in our progress and developments, stay tuned through our various dissemination channels and the frequent blogposts that are available through our **website**.



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