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***Professional experience*:**

2020 – today	Freelance Academic Editor
2019 – today	City, University of London, Researcher and Visiting Fellow Department of Electrical and Electronic Engineering, City, University of London, Northampton Square, London EC1V 0HB
2017 – today	Cranfield University, Researcher and Visiting Fellow Signals and Autonomy group, Centre for Electronic Warfare, Information and Cyber, Cranfield University, Defence Academy of the UK, Shrivenham, SN6 8LA, UK
2017 – today	COST Expert, European Cooperation in Science and Technology
2016 – 2017	Lecturer in Autonomous Systems Signals and Autonomy group, Centre for Electronic Warfare, Information and Cyber, Cranfield University, Defence Academy of the UK, Shrivenham, SN6 8LA, UK

Education:

2017	PhD in Defence and Security; research topic "3D Automatic Target Recognition for Missile Platforms", Cranfield University, UK The main topic of the PhD, funded by MBDA UK, was the design and development of missile seekers architecture and novel 3D target detection and recognition schemes appropriate for time-critical future missile systems.
2012	MSc in Guided Weapons Systems, Cranfield University, UK

Projects involved:

2019 - 2020	"Planetary RObots Deployed for Assembly and Construction Tasks (Pro-ACT)" funded by H2020
2017-2018	"*Integrated 3D Sensors (I3DS)*", in cooperation with Thales Alenia Space and funded by H2020.
2017-2018 *(Co-I)*	"*Robotics & Remote Sensing for HMA & ERW Survey: Southeast Asia Feasibility Study with LMIC Collaborator Engagement*" awarded by GCRF UK (Global Challenge Research Fund)
2017-2018 *(Co-I)*	"*Infrared-Simultaneous Localization And Mapping for Planetary Rovers*" for space rover applications awarded by UK-Space

2017-2018 *(Co-I)* "*Unmanned Auto-Return Urban Driving for Small Electronic Vehicles*" in cooperation with TMSUK UK and funded by EPSRC. This project aims to develop navigation algorithms for autonomous vehicle driving in GPS-limited areas by exploiting visual and laser means.

2016-2017 *(Co-I)* *"Pothole Identification and Management Autonomous System*" awarded by EPSRC. This project aims to develop deep learning algorithms to detect road corruption automatically.

2016-2017 "*An Active Learning Framework for Threat Object Detection*", awarded by the Home Office UK, to investigate Artificial Intelligence based algorithms for automatic aviation threat detection

2016 *(Co-I)* "*Target tracking development programme*" in cooperation with General Dynamics UK. This project aimed to develop a robust algorithm for visual-based target tracking.

2015 "*Feasibility and performance of 3D ATR for missile systems*" in cooperation with SAGEM as part of the MCM ITP project. This project investigated the capabilities of the 3D ATR algorithms for autonomous systems and specifically missile systems. Trials included several simulated but highly credible ground-to-ground and maritime missile engagement scenarios. Although the scenarios simulated the missile under various altitudes, headings, distance to the target, and sensor resolutions, notable recognition performance was achieved.
The MCM ITP (Materials and Components for Missiles, Innovation and Technology Partnership) is a UK MoD and DGA sponsored research fund open to all Anglo-French companies and Academic Institutions.

Publications:

[1] O. Kechagias-Stamatis and N. Aouf, "Automatic Target Recognition on Synthetic Aperture Radar Imagery: A Survey," IEEE Aerosp. Electron. Syst. Mag., vol. 36, no. 3, 2021.

[2] O. Kechagias-stamatis, N. Aouf, and J. A. Koukos, "Deep Learning Fusion for COVID-19 Diagnosis," medarxiv, 2020.

[3] O. Kechagias-Stamatis, N. Aouf, V. Dubanchet, and M. A. Richardson, "DeepLO: Multi-projection deep LIDAR odometry for space orbital robotics rendezvous relative navigation," Acta Astronaut., vol. 177, no. July, pp. 270–285, 2020.

[4] O. Kechagias-Stamatis, N. Aouf, and V. Dubanchet, "Evaluating 3D local descriptors and recursive filtering schemes for LIDAR-based uncooperative relative space navigation," J. F. Robot., vol. 37, no. 5, pp. 848–888, Aug. 2020.

[5] O. Kechagias-Stamatis, N. Aouf, and M. A. Richardson, "Performance evaluation of single and cross-dimensional feature detection and description," IET Image Process., vol. 14, no. 10, 2020.

[6] O. Kechagias-Stamatis and N. Aouf, "A New Passive 3-D Automatic Target Recognition Architecture for Aerial Platforms," IEEE Trans. Geosci. Remote Sens., vol. 57, no. 1, pp. 406–415, 2019.

[7] O. Kechagias-Stamatis and N. Aouf, "Fusing Deep Learning and Sparse Coding for SAR ATR," IEEE Trans. Aerosp. Electron. Syst., vol. 55, no. 2, pp. 785–797, Apr. 2019.

[8] O. Kechagias-Stamatis and N. Aouf, "H∞ LIDAR odometry for spacecraft relative navigation," IET Radar, Sonar Navig., vol. 13, no. 5, pp. 771–775, May 2019.

[9] O. Kechagias-Stamatis, N. Aouf, and M. A. Richardson, “High-speed multi-dimensional relative navigation for uncooperative space objects,” Acta Astronaut., vol. 160, pp. 388–400, Jul. 2019.

[10] O. Kechagias-Stamatis, N. Aouf, and M. A. Richardson, “Single and Cross-Dimensional Feature Detection and Description: An Evaluation,” no. arxiv.org/abs/1910.08515, Oct. 2019.

[11] H. Isakhani, N. Aouf, O. Kechagias-Stamatis, and J. F. Whidborne, “A Furcated Visual Collision Avoidance System for an Autonomous Micro Robot,” IEEE Trans. Cogn. Dev. Syst., pp. 1–1, 2018.

[12] O. Kechagias-Stamatis, N. Aouf, G. Gray, L. Chermak, M. Richardson, and F. Oudyi, “Local feature based automatic target recognition for future 3D active homing seeker missiles,” Aerosp. Sci. Technol., vol. 73, pp. 309–317, Feb. 2018.

[13] O. Kechagias-Stamatis, “Target recognition for synthetic aperture radar imagery based on convolutional neural network feature fusion,” J. Appl. Remote Sens., vol. 12, no. 04, p. 1, Dec. 2018.

[14] O. Kechagias-Stamatis, N. Aouf, and D. Nam, “3D Automatic Target Recognition for UAV Platforms,” in 2017 Sensor Signal Processing for Defence Conference (SSPD), 2017, pp. 1–5.

[15] O. Kechagias-Stamatis, N. Aouf, C. Belloni, and D. Nam, “Automatic X-ray image segmentation and clustering for threat detection,” in Target and Background Signatures III, 2017, vol. 10432, p. 24.

[16] O. Kechagias-Stamatis, N. Aouf, and L. Chermak, “B-HoD: A lightweight and fast binary descriptor for 3D object recognition and registration,” in 2017 IEEE 14th International Conference on Networking, Sensing and Control (ICNSC), 2017, pp. 37–42.

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[20] Z. Wieszok, N. Aouf, O. Kechagias-Stamatis, and L. Chermak, “Stixel based scene understanding for autonomous vehicles,” in 2017 IEEE 14th International Conference on Networking, Sensing and Control (ICNSC), 2017, pp. 43–48.

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[22] O. Kechagias-Stamatis and N. Aouf, “Histogram of distances for local surface description,” in 2016 IEEE International Conference on Robotics and Automation (ICRA), 2016, vol. 2016-June, pp. 2487–2493.

[23] O. Kechagias-Stamatis and N. Aouf, “Fast 3D object matching with Projection Density Energy,” in 2015 23rd Mediterranean Conference on Control and Automation, MED 2015 - Conference Proceedings, 2015, pp. 752–758.

Regular reviewer:

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IEEE Intelligent Transportation Systems Society
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IET Radar, Sonar, and Navigation
IET Image Processing
IET Electronic Letters
The Imaging Science Journal, Taylor and Francis
SPIE, Journal of Optical Engineering
SPIE, Journal of Electronic Imaging
SPIE, Journal of Astronomical Telescopes, Instruments and Systems
SAGE, Proceedings of the iMeche, Part G: Journal of Aerospace Engineering
SAGE, International Journal of Distributed Sensor Networks
MDPI, Journal of Remote Sensing
MDPI, Journal of Electronics
MDPI, Journal of Applied Sciences
MDPI, Journal of Marine Science and Engineering
MDPI, Journal of Processes
MDPI, Sensors Journal

Languages:

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German (proficiency)