

Computer Vision for Safety

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SOUTH AFRICAN
COUNCIL FOR AUTOMATION
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ABOUT THE WEBINAR

Computer vision has become a transformative tool in monitoring and controlling industrial environments, particularly in safety-critical applications. One such application is the use of virtual fencing around dangerous zones, where computer vision algorithms are employed to detect access to hazardous areas. By continuously monitoring the environment, the system identifies zone breaches in real-time, automatically communicates these breaches to the control room and machinery within the virtual zone is interlocked, preventing further risks.

This talk will explore the integration of deep learning models into safety systems, highlighting the challenges of model selection, iterative model training, real-time performance, and system interlocks. Practical examples from a virtual fencing system developed for industrial environments will be used to demonstrate the application of these techniques in real-world industrial settings.



Doron Joffe
Lead Speaker

ABOUT THE SPEAKER

Doron Joffe is a Senior Consultant at Opti-Num Solutions, specialising in the development and application of machine vision technologies for industrial processes. With a B.Sc. in Chemical Engineering from the University of the Witwatersrand (Wits University), Doron built a strong foundation in engineering before transitioning to the dynamic fields of machine vision and data science. Doron has since led the development, integration, and implementation of machine vision solutions across multiple industrial sites throughout South Africa. His work focuses on optimising control systems, enhancing operational efficiency, and driving automation through cutting-edge visual recognition technologies. With a deep understanding of both industrial processes and advanced machine vision techniques, Doron plays a key role in advancing the capabilities of control systems in the manufacturing and industrial sectors.



Jason Miskin
Webinar Facilitator

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