

**TRACK 3: 4TH INDUSTRIAL REVOLUTION****“DEEP LEARNING FOR MAINTENANCE APPLICATIONS”**

BY

MR ZIV FREUND

ELBIT SYSTEMS EW & SIGINT – ELISRA LTD

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**ABSTRACT**

Recent technological breakthroughs in the field of Machine Learning (ML), such as Deep Learning (DL), enabled today to add Artificial Intelligence (AI) capabilities to systems and applications that were only dreamt of until recently. Many commercial applications already use these technologies, such as Speech Recognition, Visual Scene Understanding and Natural Language Processing (NLP). Elisra adopted this technology and is now using it to break limitations in SIGINT & EW systems.

In this talk we will give a short introduction to the AI revolution and show how this technology can be used to improve the maintenance, support and reliability of our systems. We will give a few examples of how AI can be used for predictive maintenance and shorten maintenance cycles, to improve systems abilities to overcome malfunctions during their operation and to reduce maintenance and installations costs.

**BIOGRAPHY OF SPEAKER**

Ziv Freund joined Elbit Systems – EW & SIGINT – Elisra in 2009 as an algorithm engineer. From 2012 to 2017 he led the computer vision research group and was a part of the algorithmic design of Elisra’s IR Based MWS systems. Since 2017 he is the head of AI research group in Elisra. Ziv holds a BSc, MSc and MBA from Tel Aviv University and is currently a PhD candidate in the field of Deep Learning in Tel Aviv University.