

# **MATLAB Expo**

## **May 10<sup>th</sup> and 11<sup>th</sup>, 2023**

**Aerospace and Defense**

# May 10, 2023

<p><b>Can You See Me Now? Analyzing Satellite-to-Ground Station Visibility</b></p> <p>Rameez Ahmed, MathWorks Mike McLernon, MathWorks Ahmad Saad, MathWorks</p> <p>Wed, May 10   9:00 am - 10:30 am (+04)</p> <hr/> <p><a href="#">Register/Log in</a> to save session</p> <p>Wireless Connectivity and Radar</p>	<p><b>Catching Fire: Using Autonomous Drones to Detect and Track Wildfires</b></p> <p>Sarah Mohamed, MathWorks Shweta Singh, MathWorks Brenda Zhuang, MathWorks</p> <p>Wed, May 10   9:00 am - 10:30 am (+04)</p> <hr/> <p><a href="#">Register/Log in</a> to save session</p> <p>AI</p>	<p><b>Model Autonomous Navigation of a Mars Rover</b></p> <p>Ameya Rajendra Godbole, MathWorks Chinmayi Lanka, MathWorks Kritika Ramani, MathWorks Harshal Upadhyay, MathWorks</p> <p>Wed, May 10   9:00 am - 10:30 am (+04)</p> <hr/> <p><a href="#">Register/Log in</a> to save session</p> <p>Autonomous Systems and Robotics</p>	<p><b>Process of Building AI Models for Predicting Engine Performance and Emissions</b></p> <p>Shakti Saurabh, Cummins Britant Sureka, Cummins</p> <p>Wed, May 10   9:30 am - 10:00 am (+04)</p> <hr/> <p><a href="#">Register/Log in</a> to save session</p> <p>Algorithm Development and Data Analysis</p>	<p><b>Model-Based Design and Prototyping of FPGA/SoC in an Aerospace Application</b></p> <p>Ashish Vijay, Collins Aerospace</p> <p>Wed, May 10   10:00 am - 10:30 am (+04)</p> <hr/> <p><a href="#">Register/Log in</a> to save session</p> <p>Modeling, Simulation, and Implementation</p>
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# May 11, 2023

## MATLAB for Control of Cryogenic DT Fuel for Nuclear Fusion Ignition Experiments

Dr. Suhas Bhandarkar, Lawrence Livermore National Laboratory

Thu, May 11 | 8:30 am - 9:00 am (+04)

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Algorithm Development and Data Analysis

## Accelerate Aerial Autonomy with Simulink and Microsoft Project AirSim

Effendi Dufford, Microsoft  
Balinder Malhi, Microsoft  
Fred Noto, MathWorks

Thu, May 11 | 9:30 am - 10:00 am (+04)

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Autonomous Systems and Robotics

## Verification of Avionics Systems Using Simulink Test and Simulink Real-Time

Maciej Stefaniak, GE Aerospace

Thu, May 11 | 1:00 pm - 1:30 pm (+04)

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Modeling, Simulation, and Implementation

## DevOps with MATLAB: A Predictive Maintenance System for Streaming Data

Christine Bolliger, MathWorks  
Nicole Bonfatti, MathWorks  
Seth DeLand, MathWorks

Thu, May 11 | 1:00 pm - 1:30 pm (+04)

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Cloud, Enterprise, and DevOps

## Understanding and Verifying Your AI Models

Lucas Garcia, MathWorks

Thu, May 11 | 1:00 pm - 1:30 pm (+04)

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AI

## ANA's Predictive Maintenance Challenge: Replace Aircraft Parts Before They Break

Sadanari Shigetomi, All Nippon Airways Co., Ltd.  
Naoya Kaido, All Nippon Airways Co., Ltd.

Thu, May 11 | 9:30 am - 10:00 am (+04)

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AI

## Development of Signal Processor and Extractor Module for 3D Surveillance Radar

Mohit Gaur, Bharat Electronics Limited

Thu, May 11 | 10:00 am - 10:30 am (+04)

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Wireless Connectivity and Radar

## Optimizing the Design and Operation of Radar and Antenna Systems in MATLAB

Sumit Garg, MathWorks  
Chris Lee, MathWorks

Thu, May 11 | 1:00 pm - 1:30 pm (+04)

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Wireless Connectivity and Radar

## Intel Agilex FPGA-in-the-Loop Simulation: Enabling DSP Emulation for Space-BACN

Ziyi Zhu, Intel

Thu, May 11 | 1:30 pm - 2:00 pm (+04)

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Wireless Connectivity and Radar