



# WEEKEND TALK

WEEK – 39  
No Participation Fee



Centre of Excellence in Safety  
Engineering and Analytics (CoE-SEA)

Prof. J Maiti  
Chairman, CoE-SEA

Prof. O B Krishna  
Convener

*On Safety Engineering, Management and Analytics (SEMA)*

Conducted under  
“AZADI KA AMRIT MAHOTSAV”  
- 75 years of India’s Independence



**TOPIC: IMPROVING SAFETY USING DATA ANALYTICS AND EYE TRACKING:  
A CASE STUDY IN AIR TRAFFIC CONTROL OPERATIONS**



**Dr. Saptarshi Mandal**  
User Research Specialist  
Microsoft, USA

Dr. Saptarshi Mandal is a User Research Specialist in the Human Factors Centre of Excellence at Microsoft USA. He pursued his undergraduate degree in the Department of Industrial and Systems Engineering at IIT Kharagpur. He obtained his Ph.D. with a focus on human factors from the Department of Industrial and Systems Engineering, University of Oklahoma, USA in the year 2020. He has worked as a management consultant at PwC India and is currently working with Microsoft, USA. His current work aims to develop statistical analysis and machine learning tools to improve the usability of products in the wearable and AR/VR domains. His research focuses on the application of statistical tools to analyze and improve complex human-integrated systems (e.g., air traffic control operations, industrial safety, etc.). He specializes in the application of eye-tracking and machine learning techniques to evaluate human cognitive processes and decision-making strategies. He is a recipient of numerous awards, which includes the Best PhD Dissertation Award, PhD Dissertation Excellence Award, Graduate Liaison Scholarship, Best Master’s Thesis (University of Oklahoma), and Best Student Paper Award at the HFES Annual Meeting 2016.

[Click here to join](#)

**Moderators:** Mom Mitra, Tata Steel, and Souvik Das (7384804020), Ashish Garg (7477514701), Sinjana Choudhuri, Sween Josco, IIT Kharagpur  
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**Date**  
February 25, 2022

**Time**  
08.00 pm -09.00 pm (IST),  
09.30 am - 10.30 am (EDT),  
08.30 am - 09.30 am (CDT),  
06.30 am - 07.30 am (PDT),  
03.30 pm – 04.30 pm (CET)