



UNIVERSITY OF
BIRMINGHAM

May 24th, Friday, 9:00 – 10:00 am

AI & Railways

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Reader in Railway and
Civil Engineering
at the University of Birmingham, UK



Location: BME Building, K Upper Ground Floor, Room 79





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Abstract

This presentation will highlight the recent research into digital railway innovation with special focus on **artificial intelligence (AI)** and **digital twin technologies** for railway systems. The disruptive digital twins and artificial intelligence tools and strategies to safeguard railway systems as a whole will be discussed. The presentation will highlight key strategies and challenges to implement new technologies sustainably. The insights into railway intelligence and the challenges to improve trustworthiness and robustness of AI will be discussed in the presentation. The focus of the presentation is placed on systems thinking and multi-level, multi-scale interconnected digitisations that matter to every stakeholder. AI for railways will be presented to enhance the safety, maintainability, sustainability and reliability of railway systems within the built environment.

