

Transformation in action with Cubic Transportation Systems

A project with Cubic Transportation Systems led by Professor Danilo Mandic and others from the Department of Electrical and Electronic Engineering is putting AI at the heart of planning for subway systems around the world.

The work, commissioned through Imperial Consultants, ranges from revenue protection – which costs the Metro networks in cities like London and New York millions in lost revenue each year – through to effective maintenance scheduling to reduce downtime and increase operational efficiency.



Professor Danilo Mandic and colleagues Professor Tony Constantinides, Dr Arta Babaei, Giorgos Iacovides and Wuyang Zhou from the Artificial Intelligence and Data Analytics Lab



This activity moves away from energy-hungry machine learning models to explore how generative AI can create synthetic data to help train the models.

“This collaboration is an opportunity for us to develop the transportation experts of the future. Our students and researchers will be working closely with Cubic to harness the latest innovations in technology to solve transportation’s most significant challenges”

- **Professor Danilo Mandic**

“Our long-term vision is to replicate this model in key markets around the world, expanding our industry-leading partnerships and ensuring innovation is at the core of everything we do.”

- **Peter Montgomery-Torrellas, president of Cubic Transportation Systems**



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