

**Autum
School 2025**

Welcome and Introduction

**Dr Luis Delgado
Centre for ATM Research
University of Westminster
27 Oct 2025**

**Transportation
Research
Laboratory**

**Quintin Hogg
Trust**

University of Westminster – Centre for Air Traffic Management Research

Transportation
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- Centre for Air Traffic Management Research
 - since 1999
 - Andrew Cook, Luis Delgado, Gérald Gurtner (PRF)
 - Graham Tanner, Tatjana Bolić (SRF)
 - Majid Soolaki, Michal Weiszer (RF)
 - <https://blog.westminster.ac.uk/atm-team/>
- Core group of strategic European partners
- Teaching and visiting students
 - MSc Air Transport Planning & Management
 - *Air traffic management (incl. future concepts & ENV impact)*
 - *Air transport forecasting & market research*
 - visiting PhD students (France, Spain, India, China)
 - PhDs (internal cf. external)
 - Transportation Research Laboratory



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■ Specialisms of our Centre (no implied order)

- performance assessment (from fundamental to industrial)
- economic analysis (incl. behavioural economics & conjoint)
- modelling and simulation (incl. ABM, ML, metamodeling)
- pax centricity, mobility, **multimodality** (SESAR award)
- environmental analysis
- flight dynamics; flight prioritisation
- data management

■ Applied research – main funders:

- SESAR & Clean Sky (both via Horizon); Horizon 2020/Europe directly ('Smart, green and integrated transport')
- EUROCONTROL, ANSPs, airlines
- with wide range of stakeholders, incl. airports, software/service providers; other research institutes



<https://blog.westminster.ac.uk/atm-team/>

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search

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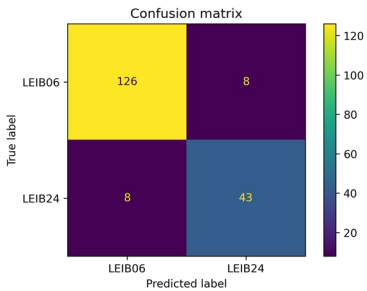
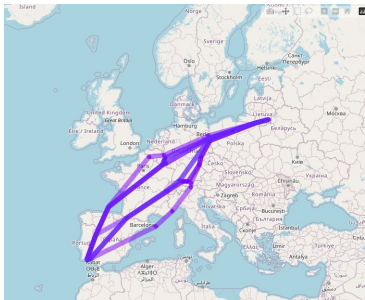


Horizon 2020
European Union funding
for Research & Innovation

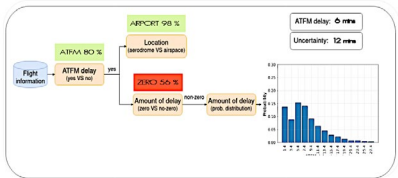
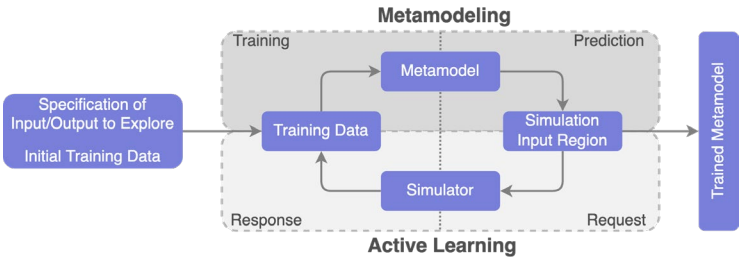


databricks

Centre for
Air Traffic Management
Research



School of Architecture
and Cities



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**School of Computer
Science and
Engineering**

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Air Traffic Management
Research



**DATA SCIENCE AND
INFORMATICS**

DATA SCIENCE AND ANALYTICS
BSc Honours

Part of Computer Science and Engineering and Data Science and Informatics

**School of Architecture
and Cities**

DATA SCIENCE AND ANALYTICS MSc

Part of Computer Science and Engineering and Data Science and Informatics

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Transport Research Lab

SCIENCE AND
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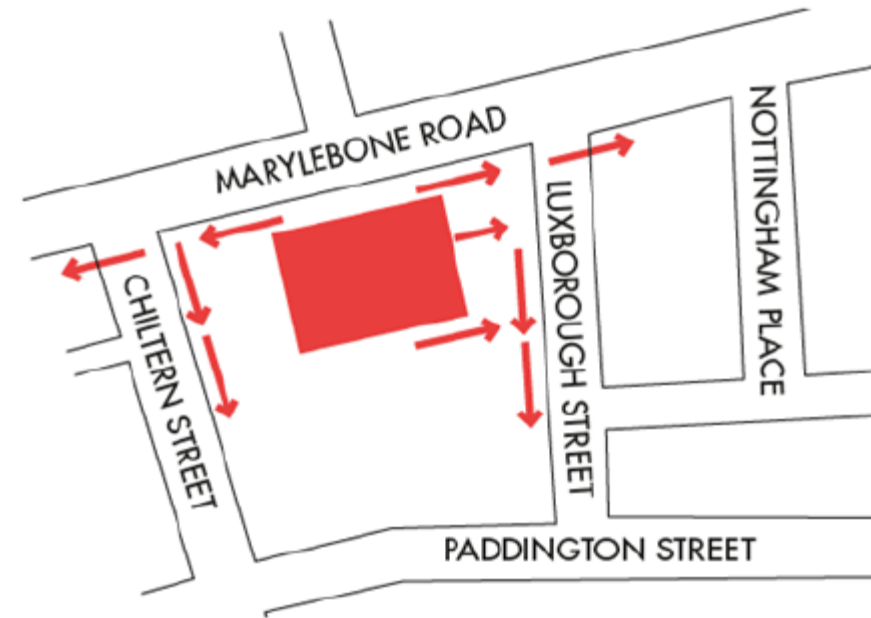
- So far, co-supervision of final dissertations for BSc and MSc in topics such as:
 - Output of simulator processing and visualisation
 - Fleet assignment optimisation problem
 - Trajectory clustering
 - Passengers assignment to flights
 - Process mining applied to simulation
 - ...
- Currently
 - Autumn School 2025!
- In the near future
 - Internships to support data infrastructure and computing
 - Industry exchange programme topics
 - ...

<https://blog.westminster.ac.uk/trl/>



FIRE ACTION NOTICE

DISPERSAL EVACUATION STRATEGY – MARYLEBONE



Autum School on Data Science, AI and modelling for Air Transport

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■ Monday 27/10/2025

Time	Activity
09h00-09h30	Arrival
09h30-09h45	Introduction to Autum School
09h45-10h45	Introduction to air traffic management and mobility modelling
10h45-11h15	Coffee break
11h15-13h15	Anonymised mobile network data for passenger archetypes and modelling
13h15-14h15	Lunch
14h15-15h15	Modelling and simulation of the system (Mercury ABM)
15h15-16h15	Process mining for air transport and simulation
16h15-16h30	Coffee break
16h30-17h00	Regression models for flight operations
17h00-17h30	Clustering and trajectory analysis

Autum School on Data Science, AI and modelling for Air Transport

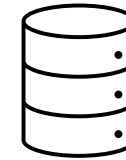
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■ Tuesday 28/10/2025

Time	Activity
12h00-13h00	Lunch
13h00-17h00	Data sources, models and libraries for air transport modelling – Hands on
17h00-17h20	Examples of research on air transport (and ideas for hackathon topics)
17h20-17h30	Groups formation and discussion of topics



https://github.com/UoW-ATM/Autumn_school_2025



Data in SharePoint ([here](#))



CLIMaCCF

OpenAP

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■ Wednesday 29/10/2025

- Human–AI Teaming in Aviation: Developing the Next Generation of EU Digital Assistants – Webinar organised by European Research Projects (8h30-11h30)
- Working on problem

■ Thursday 30/10/2025

- Working on problem

■ Friday 31/10/2025

Time	Activity
09h00-10h00	Arrival
10h00-12h00	Groups presentation
12h00-13h00	Lunch
13h00-14h30	Groups presentations
14h30-15h00	Coffee break
15h00-15h30	Closing ceremony, certificates and awards

**Autum
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2025**

Thank you!

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