

Dominic Duxbury

Computer Science PhD Candidate

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Publications

- Unpublished **Dynamic decision making for situational awareness using drones**
In this paper we present five desiderata for dynamic decision support and we compare methods with regards to the consistency of trade-offs between criteria and the stability of results under small changes to criteria values.
- Unpublished **Trust in real-time decision support: A case study**
This paper evaluates the effects of decision support features on the antecedents of trust by carrying out a user study with a drone-assisted maritime operations scenario.
- 2019 **Trusted and Auditable Decision Aids over Data Streams**
Proceedings of the Workshops of the EDBT/ICDT 2019 Joint Conference
This paper investigates approaches for bringing together stream management and decision support systems in a way that is both auditable and trustable.

Education

- 2017–2021 **Researcher PhD Student** University of Manchester
As part of a PhD, I investigated methodologies for combining stream processing engines with decision support algorithms to enable dynamic decision support in a way that supports trust calibration and auditability.
- 2013–2017 **Computer Science and Maths** University of Manchester
BA (Hons) 1st Class
- 2011–2013 **A Levels** Cardinal Newman College, Preston
AAA in Maths, Further Maths and Chemistry
79% in AS Level Economics
- 2006–2011 **GCSE** Holy Cross Catholic College, Chorley
6 A*, including 3 A* in sciences and an A* in maths
5A, including English

Experience

- 2017–2021 **BAE Systems** New Malden
Researcher
I supported BAE research as part of a 3 month internship, split across 4 years.
- 2015–2018 **Laterooms.com** Manchester, Greater Manchester
Data Scientist
I supported business intelligence and maintained the hotel ranking algorithm.
- 2012–2013 **Extreme Karting UK** Euxton, Lancashire
Go-Karting Marshall
I helped to maintain the go-karts and track at a local go-karting track.

Personal Projects

- 2021 **Lead Developer** DACC Data
As part of a team, I worked to develop a graph data product for Ecommerce and created an application for funding from InnovateUK.
- 2019 **Data Consultant** Pdfta
I produced and delivered a talk at the department for transport promoting pdfta.
- 2014 **Web Development** Allen Duxbury Solutions
I worked to create webpages for small businesses. This gave an opportunity to improve my web development skills and taught me the basics of running a business.

Volunteer Work

- 2018–2021 **Festival Volunteer** Oxfam
I volunteered for Oxfam, promoting their campaigns at various festivals around the UK.
- 2011–2013 **In-Shop Volunteer** British Heart Foundation
I volunteered at the British Heart Foundation shop in Chorley once a week. My role consisted of sorting and organising donations made to the shop.

Awards

- 2008–2013 **Duke Of Edinburgh Gold, Silver and Bronze awards**
The Duke Of Edinburgh's Award
I completed all three awards, cumulating in a four week trip to Thailand for my gold award. During this time, I worked as part of a team to plan and complete a five day kayaking expedition around the islands. The other part of our trip was spent helping out in the community. This included teaching English at the local school, assisting at a Cambodian refugee camp and helping at an animal shelter.

Languages

French conversational and intermediate written skills and an A* at GCSE.
Spanish basic skills including a 2-1 on the introduction to Spanish course.

Software Skills

Web Development: JavaScript, React, HTML, CSS, GraphQL, SQL, Git.

Streaming Software: Java, Apache Flink, Apache Kafka, Apache Storm.

Machine Learning: Python, Scikit-learn, Matplotlib, TensorFlow.