

Module 03: Foundations of Causal and Generative Models

FCIT 607: Data, Methods, and Models for Future Cities

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Abstract

This learning module ...

Module Overview

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“No causes in, no causes out!” - Nancy Cartwright (1989), *Nature’s Capacities and Their Measurement*. Oxford: Clarendon Press.

Learning Objectives

i By the end of the course module, students will be able to:

1. Coming soon...
2. Coming soon...
3. Coming soon...

Module Topics

- We Can Do Better Than the Status Quo!
 - Centring Causality and Uncertainty with Causal and Bayesian Inference
- What are models? What is Causal Inference?
 - Making Our Assumptions Explicit (Part 1): Graphical Models
- What is Bayesian Inference?
 - Counting and the Reallocation of Credibility Across All Possibilities
- Conceptual Causal Models Come First, Statistical Models Come Second

Assigned Reading + Lecture Slides

- [Foundations of Causal and Generative Models](#)
- [Module 3 Slides](#)

Lab

Coming soon...

Questions, Tasks, and Challenges

Coming soon...

Recommended Additional Resources

- Coming soon...

References

Cartwright, Nancy. 1989. *Nature's Capacities and Their Measurement*. Clarendon Press.