F1801Q161 - Causal Networks
Final Project (2024-2025 Edition)

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1 Introduction

In the paper titled "Finding minimal d-separators in linear time and applications", authors provide linear time algorithms for two graphical primitives: to test, if a given set is a minimal d-separator, and to find a minimal d-separator in directed acyclic graphs (DAGs), completed partially directed acyclic graphs (CPDAGs) and restricted chain graphs (RCGs) as well as minimal m-separators in ancestral graphs (AGs).

You are asked to implement the algorithms described in the paper, i.e. the pseudo-codes starting with a **function** keyword.

Using a Colab Notebook, write the following:

1. Introduction - Describe the computation of minimal d-separators in linear time step-by-step,
2. Implementation - Provide and implementation of said algorithms,
3. Tests - Execute the implemented algorithms and test them with the examples provided in the paper.

Delivery and evaluation are described in the "Exam" section of the Course page.