University of Liverpool | MSc Computer Science
COMP702 | Open Source Temporal Network Library

15 MAY 2020

ATTENDEES

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SYNOPSIS

Weekly meeting

NOTES

Reading/developing background knowledge to form a good impression of the area before deciding on an initial architecture. Thoughts on classes; a network input/generator class which can validate inputs and create networks. Edges and nodes which are subcomponents of a network/graph, of which there can be various types (with base class?). An observer class which can view/request a representation of the network at time t, or over a time interval. Can also take measurements of the network and can be extended to run particular algorithms. A class for network visualization. All classes can have base class and be extended upon to allow for flexible design. Review open source library setup on github. Current temporal graph libraries include teneto and pathpy. A good algorithm to implement is to find the shortest path to a particular node (traverse network, edge duration). Check other libraries to see how they implement algorithms (networkx, for example). One aspect of the project could be implementing different network generators/models (when you don't have input data, you can build a network using a model).

ACTION ITEMS

Create a name for the library.

Create a repository for the network (include a roadmap to provide project plan/direction).