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

**28 August 2020**

## ATTENDEES

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## SYNOPSIS

Weekly meeting.

## NOTES

Need to add remove edge/node functionality. Make the default duration of an edge 0 if not duration is supplied in the input data. Develop GitHub page, add roadmap, strategy, philosophy and make it open source ready. For the foremost tree algorithm, check if the input graph is directed/undirected and cater for both. For the undirected case, for each edge, check which node has the foremost time 'inf' and which has already been reached, and travel from reached to unreached. If both nodes are unreached, skip. If the data structure of the edges & nodes were to be improved for efficiency, most likely it would be to cater for specific algorithms (for example, current structure for edges is an edge-stream which caters to the foremost tree algorithm). Therefore, additional data structures could be implemented in parallel with options. It would be useful to implement a method to extract the underlying (static) graph from a temporal graph. The 'get_temporal_graph' method should include parameters for specifying time interval(s) and also sets of vertices.

## ACTION ITEMS

- Add remove node & remove edge.
- Outline library roadmap.
- Update the 'get_temporal_subgraph' method.
- Add 'extract_underlying_graph' method.