Critique of Group 6 Midterm Presentation
Atma Persaud (Group 11)

Relevance to Course Material: Which chapter, section or topics in the course does the presented material refer to (50 word limit)?

A lot of geospatial problems need networks to be represented (for example, shortest path on a road transport network).

Specifically, this material is related to sections 3.4 and 5.7, in our GIS textbook, as well as chapter 6 of the spatial database book.

Novelty: What is the new information in the Encyclopedia articles with respect to the textbook material (50 word limit)?

The textbook mainly focuses on networks to represent space. These articles add a temporal component.

When time is introduced, the status, topology, and edge weights of the network can change over time, so these articles introduce new models and algorithms to solve these problems.

Societal Motivation: What is the motivation behind the new information in the Encyclopedia articles? For example, list societal applications that may use these new concepts, use cases for these new ideas, etc. (50 word limit)

One use case is road networks. For example, a good representation and algorithm for shortest/fastest paths would be desirable to optimally determine a route from the MSP airport to the University.

Another similar use case is air travel networks. In this case there are different constraints (e.g. you cannot have airplanes flying too close to each other)

Computer Science Motivation: If applicable, what is the Computer Science (CS) benefit of the proposed approaches (e.g. new algorithms, data structures or other CS concepts, scalability, increase in productivity for software engineers, etc) (50 word limit)

These papers introduce a new representation, called the time-aggregated graph, wherein each edge has a time series of edge weights. This allows us to gain a compact representation, with less
In addition, new algorithms are introduced, such as the best start time shortest paths and the all start time shortest paths.

**Overall Presentation:** Provide feedback on the overall presentation. How well were the ideas conveyed? Did you understand most of the talk (or 75%, 50%, 25%, 5%, 0%)? Were the ideas illustrated well (including the usage of both positive and negative examples)? Also comment on audience engagement. Did the speaker ask the audience questions, etc. (100 word limit)

The presenters did very good job. They engaged audience with questions, and confirmed that audience understood the presentation.

The slides contained relevant figures. I understood most of the talk (more than 75%).

**Presentation Critique:** Did the speaker inspire you to want to learn more about the material covered? If you had to rate the presentation with either a check, check- or check+, how would you rate it? Explain. (50 word limit)

The speakers kept the topics very interesting and did inspire me to want to learn more about their material. I would rate this presentation with a check+.