Research Methods: Literature Analysis Workshop

The document to analyse is at:
http://dl.acm.org.ezp.lib.unimelb.edu.au/citation.cfm?doid=2914586.2914587
You should be able to access this using your Melbourne login details through the link.

It will help you if you revise the material in Chapter 3 of "Writing for Computer Science", and other subject content on literature reviews.

Overview

This paper was presented at the ACM Hypertext Conference in 2016, and won the best paper award. It approaches a problem that has both theoretical and practical aspects: avoiding freezes in videos on web pages. It has minimal reference to algorithms, but readers will benefit from a rudimentary understanding of either graphs (in the mathematical sense) or trees (in the CS sense). It is an experimental paper, and thus aligns well with some of the types of papers that many experimental CS students and researchers will produce in the course of their own work.

Task A: Getting an Overview

Review the abstract, introduction (Sec. 1) and conclusions (Sec. 5) first – get an overview of what the paper promises. Then consider the following questions:

1. What is the main problem or research question this paper addresses?
2. What is the main contribution of the paper?
3. How will they prove their solution works?
4. Is the new method successful – what are the limitations of it?
5. Are there ideas for future work?

Task B: Related Work

Review the related work (Sec. 2) of the paper.

1. What are the main influences on this work?
2. What is the balance between theory and practice in this section?
3. Are there a clear research questions at the end of the review?

Task C: Evaluation

Study the evaluation work done in the paper – Sec. 4 (Evaluation). It may help to scan Sec. 3 to understand what was developed.

1. Is the method convincing – does it use appropriate measurements?
2. How clear is the method – are you certain about what was tested and how?
3. Are the results explained well – are the conclusions clear and justified?