Thomas Truong

Victoria Hilford

COSC 4351

3/25/2024

## Analysis Paper Summary

The techniques used for application specifications have been developed over the course of about 20 years and have been categorized as either formal or semi-formal through their difference in approaches, where formal sets use theoretical and mathematical approaches, while semi-formal engineering approaches utilize a UML for development of complex systems. The advantages and disadvantages of formal and semi-formal approaches have been widely debated and discussed about by numerous researchers, most notably at seminar hosted in 1998 where about 30 talks were presented that analyzed and compared the techniques utilized for application specifications.

The main approach that the researchers took towards explaining the differences between formal and semi-formal methods were that the informal approaches were easier to understand but can be more ambiguous due to their usage of diagrams requiring a more comprehensive understanding of the properties of each function. Alternatively, the formal approaches were more difficult to learn and understand because they require careful mathematical understanding but had better proof of each claim made.

The discussion sessions were organized to give as many speaker demographics as possible a chance to voice their mind, mainly through the division of young and experienced researchers. This division allowed for more stimulating and inspiring discussions between each group.