Notice of the Final Oral Examination
for the Degree of Master of Science

of

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BTech (Uttar Pradesh Technical University, India, 2009)

“PALTask: An Automated Means to Retrieve Personalized Web Resources in a Multiuser Setting”

Department of Computer Science

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Engineering and Computer Science Building
Room 468

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Dr. Alex Thomo, Department of Computer Science, UVic (Member)

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Dr. Adam Ritz, Department of Physics and Astronomy, UVic

Dr. David Capson, Dean, Faculty of Graduate Studies
Abstract
When performing web searches, users manually open a web browser, direct it to a search engine, input keywords, and finally manually filter and select relevant results. This repetitive task can negatively impact user experience, something the automation and personalization of web search can address.
This thesis presents PALTask, an Instant Message (IM) application that exploits context of both the user and their conversation in order to automate and personalize related web tasks such as web searches relevant to the conversation. PALTask dynamically gathers context and provides feedback to the user and the system at runtime by gathering keywords from the conversation and running them through various search services such as YouTube and Google to retrieve relevant results. This thesis also explores various natural language processing (NLP) tasks such as keyword extraction, sentiment analysis, and stemming. These NLP tasks help in the collection of dynamic context at runtime, identifying personalized context, and analyzing it to improve the user's experience. We also present our keyword ranking algorithm which aims to improve accuracy when retrieving web resources.