


THE UNIVERSITY OF WESTERN ONTARIO
SCHOOL OF GRADUATE AND POSTDOCTORAL STUDIES


CERTIFICATE OF EXAMINATION

Supervisor



Dr. Xianbin Wang

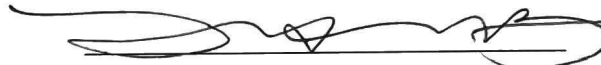
Examiners




Dr. Abdallah Shami



Dr. Mariam Capretz



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Dr. Ling Guan

The thesis by

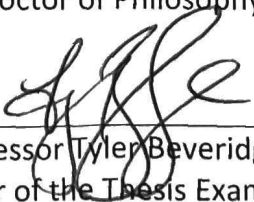
Fuad Shamieh

entitled:

**Adaptive Signalling Overhead Reduction and Content Access Throughput Provisioning Techniques
for Multimedia Streaming over Packet Switched Networks**

is accepted in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

June 21 2019
Date



Professor Tyler Beveridge
Chair of the Thesis Examination Board