Honours Thesis (COMP4906)
Pre-Proposal & Permission Form

Year: 2019-2020

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Thesis Title: Implementing Process Homeostasis Using Enhanced Berkeley Packet Filtering

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Honours Thesis Pre-Proposal

Implementing Process Homeostasis Using
Enhanced Berkeley Packet Filtering

William Findlay

April 6, 2019

1 Overview of Thesis

1.1 Motivation

1.2 Main Objectives

1.3 Equipment Requirements

1.4 Expected Deliverables

2 Bi-Weekly Schedule for First Term (Fall 2019)

Table 2.1 presents a bi-weekly schedule for the fall 2019 term. This term will be used primarily for background research on Process Homeostasis and Extended Berkeley Packet Filtering in the Linux Kernel.

Table 2.1: A bi-weekly schedule for the fall 2019 term.

Bi-weekly Period	Task
Sep 04 - Sep 17, 2019	Background research on eBPF
Sep 18 - Oct 01, 2019	Background research on pH
Oct 02 - Oct 15, 2019	Explore other intrusion detection methods
Oct 16 - Oct 29, 2019	Explore other eBPF implementations of intrusion detection
Oct 30 - Nov 12, 2019	Determine best approach to solve the problem
Nov 13 - Nov 26, 2019	Draft thesis proposal report
Nov 27 - Dec 06, 2019 [a]	Finalize thesis proposal report

[a] This period is slightly shorter to reflect the end of the term.