COMP90007 Internet Technologies
Research Project

Due Dates:
12 Oct 2018 (5pm)

To be done individually

1. Introduction

The aim of this project is for you to do research on a cutting-edge topic related to computer networks. You will be required to consult scholarly sources for your research and express them at a level that general audience can understand. You will be graded on your ability to research the state of the art of a topic on computer networks and express a coherent scholarly argument.

2. Research Report

You are required to write a **technical report** on one of the topics below. Your report should be of a 'survey' nature. A survey should allow the reader to understand the scope of the topic, its history, different approaches and their benefits and drawbacks, and topics related to the main topic. You should cite multiple scholarly references (e.g. books, research papers etc.). You are also required to have a conclusion section about your evaluation and critique on the topic.

The word limit for the report is *1000-1500 words*. Excessively long reports will be penalised.

You will receive a maximum of 15 marks for your report. The grading criteria for these 15 marks are as follows:

1. Format and Structure 10%
2. Coverage of the major themes within the topic including technical details. 40%
3. Critical evaluation 30%
4. Use of accessible examples 10%
5. Quality of sources cited 10%

2.1. List of topics
1. Content delivery networks
2. Software defined networking (SDN)
3. Mobile Edge Computing
4. Fog computing
5. Internet of Things
6. Wireless body area network
7. Cloud Services (IaaS, SaaS, PaaS)
8. 5G
9. Tactile Internet
10. Micro services
11. Energy efficiency of cloud computing
12. Context aware system and network optimisation
13. Fibre-to-the-home (FTTH)
14. Peer-to-peer (P2P) streaming
15. IPv6 deployment
16. Internet video-on-demand
17. Defence against Distributed Denial of Service (DDoS) attack
18. Sensor networks
19. Security issues in Cloud Computing
20. Big data network analytics

Other topics may be suitable. Please consult the lecturer or a tutor if you wish to select an alternative topic.

The university library provides free access to a wide range of scholarly publications (http://library.unimelb.edu.au/). You are encouraged to search for recent journal and conference articles on the topics listed above on the site. You can also use the textbook and the lectures as a starting point.

3. Administration
This project will be performed individually and will be worth 15% of your overall mark in the subject.

3.1 Getting help
If you have any questions, the LMS discussion board will be a useful resource in resolving any issues. If your concern is a personal matter, then you should email the subject coordinator.

Any answers posted by the subject coordinator on the LMS discussion board will be considered as part of the project specification. In addition, please keep an eye out for any LMS announcements for any changes made to the project specification.

3.2. Academic honesty

Turnitin will be used as a deterrent against academic dishonesty. The report should consist of your original work (own wording). All citations should be made in an academically recognised style, which should be used consistently throughout the report. Direct quotes should be minimal, and should be clearly highlighted by the use of quotation marks and also cited properly. If you reproduce any diagrams, they should be clearly acknowledged.

Plagiarism and collusion constitutes cheating. Disciplinary action will be taken against students who engage in plagiarism and collusion in accordance with university statute 13.1.18. For examples and more information on what constitutes plagiarism and collusion, please visit http://academichonesty.unimelb.edu.au.

3.3 Report submission

The deadline for the final report submission is as specified at the start of this project document. Your research report should be uploaded to the *Turnitin systems* as a PDF file on the LMS. The report is to be formatted on A4 sized paper in 12 pt text, with 1.5 line spacing and a minimum 2.5 cm margins on the left and right sides. The content you write should be present in the PDF file in the form of text, and not as screenshots and/or images of the text you wrote.