Professional Computing Ethics Essay

Over the past several years there has been considerable discussion in the Press about hacking. These discussions have assumed heightened significance in a world were most things, soon to include our clothes, have embedded processors, and we can now genuinely talk about an Internet of Everything. The most recent manifestation of these concerns are reports, where cyber-security researchers – "White Hat Hackers" – have been able to hack into the system that controls a car to turn off the engine http://www.abc.net.au/news/2015-07-22/cybersecurity-researchers-hack-car-and-turn-off-engine/ 6638622.

Consider the ethics of hacking, both "Black Hat" and "White Hat", in the context of the ACS Code of Professional Conduct and Professional Practice, where appropriate listing the relevant section identifiers. That is, how are these two types of hackers different, and how are the actions of each of these ethically different (if at all) from the actions of professional computer scientists generally.

Some points to note for your essay:

- Your essay should be approximately 1500-2000 words.
- For readability please typeset the text and use a serifed font, e.g. Times rather than Arial.
- Use 1.5 line or double spacing (in MS Word: Format \rightarrow Paragraph \rightarrow Line Spacing). Margins should be at least 2cm.
- Use Harvard format for your references. For assistance with this see: http://libguides.library.uwa.edu.au/harvard
- Don't forget to put your name and student number on the front.
- Please understand that if you refer to someone else's work you will normally paraphrase their remarks and include a citation (in Harvard format). If you use the authors' exact words that is a quotation, so should be surrounded by quotation marks and include a citation. Cutting and pasting without quotation marks, and particularly without a citation, is plagiarism. BTW, paraphrasing involves reading something, understanding it (which may involve reading background documents) and then summarising the main points in your own words. Minor syntactic transformations on the starting text is not paraphrasing. If you are unsure of the difference I suggest you go to:

http://www.studentservices.uwa.edu.au/ss/learning/online_services/plagiarism_portal In particular, follow the link to the FAQs and the link to the examples of what not to do.

- Hint 1: Excluding quotes which must be accurate you should be aware that contractions, such as "doesn't", "won't", etc, are inappropriate in formal writing; spell the phrases out: do not, will not, etc.
- Hint 2: If you are using MS-Word, don't ignore the red lining (assumed spelling mistakes) and green lining (assumed grammatical issues). Both can be wrong, e.g. the difference between American and Australian/British spelling or specialist words unknown to the dictionary, but often these suggestions are right. Think about each one before dismissing it.
- Hint 3: A necessary condition for a good mark is at least one reference not given to you in the assignment description.

Examples of excellent essays have been kindly provided by 2013 CITS3200 students Jack Golding and Michael Martis (and made available here with their permission, of course). http://undergraduate.csse.uwa.edu.au/units/CITS3200/essay/Jack_Golding.pdf http://undergraduate.csse.uwa.edu.au/units/CITS3200/essay/Michael_Martis.pdf

Finally, please hand in a paper copy of the signed cover sheet to the CSSE office **and** also submit the

electronic source document version using cssubmit, i.e. doc, docx, odt or tex. See the Unit Timetable on the Project web page for the date and time that the submissions close.

Michael J. Wise July 21, 2015