Galway-Mayo Institute of Technology

B.Sc (Hons) – Software Development – Year 4

Research Methods in Computing & IT

Assessment Methodology

1. Professional Literature Review / Technology Review

60%

- You are required to produce a professional literature review a written document relevant to your chosen research area.
- Your literature review should be of the order of 2,000 (minimum) to 3,000 (maximum) words (not including bibliography / references section).
- Your literature review should include at least eight credible, peer-reviewed sources (journals, conferences etc....). A higher count than ten is strongly encouraged.
- The document must follow a set structure / template. (IEEE Journal Template provided)
- The literature review should follow the IEEE format advised in class.

Notes:

- You should use methods / techniques including "Territory Maps" and "Spider Diagrams" to brainstorm the topic you are interested in. The outcome should be a refinement / scoping of the topic to an aspect (sub-section) that is of particular relevance to you. We will cover these techniques in forthcoming class sessions.
- The requirement is to then offer an analysis, critique and synthesis of the established literature relevant to your chosen area. Your discussion should be articulate, concise and convincing (using the literature you have consulted to establish your argument).
- Proper referencing to the highest professional standard is thus a basic requirement and **expectation**. We will cover referencing techniques in forthcoming class sessions.
- It is likely that a minimum of 12 15 high quality literary sources will need to be **read** in order to deliver on this requirement.
- This needs to be written in your own words (but professionally articulated), suitably supported by reference to the literature. It is up to you to ensure that you understand this requirement; **there are no marks for plagiarism**.
 - *** You are bound by the GMIT code of practice on plagiarism, so <u>please</u> <u>use correct citation and referencing</u>.

Deliverables:

- o Latex document, correctly formatted. Minimum 2000 words.
- o Due date: Friday, 1st of December, 2017 by 1:00PM; submit via Moodle.
- o This is an individual activity.

- You are required to produce a professional presentation on any one of the following areas:
 - o A Turing Award winner (pick one).
 - o Any classic algorithm that still underpins modern computer science.
 - o *Computer Science* ideas in everyday life (one or two ideas per presentation maximum).
 - o The International Computer Science Research Community
 - Other (by advance agreement with me; must have a 'research' context).

Notes:

- This as an individual exercise.
- Format will be 8 12 minute (15-minute **maximum**) presentation followed by up to 5 minutes Q&A.
- The presentation can be live (*i.e.* a person presenting) or can be pre-recorded (*e.g.* voice-over), animation, or other format / style.
- A schedule of presentations (to be heard, viewed, and considered in-class) will then be issued.
- Final presentation and any supporting artefacts must also be submitted to *Moodle*.

^{**} Early submission is strongly encouraged - you are responsible for you own time management **