TU Dublin, Tallaght Campus

BSc / HDip / MSc Project Template

Project Title

Student Name

Department of Computing

Supervised by

Dr. Supervisor Name
Department of Computing

3 November 2019

Declaration

I hereby certify that the material, which I now submit for assessment on the programmes of study leading to the award of Master of Science, is entirely my own work and has not been taken from the work of others except to the extent that such work has been cited and acknowledged within the text of my own work. No portion of the work contained in this thesis has been submitted in support of an application for another degree or qualification to this or any other institution.

_____

Student Name

3 November 2019

Acknowledgements

Personal acknowledgements and/or dedications may be included by the candidate directly after the declaration page. Where possible these should be kept to one page and be of a tone appropriate to a higher degree.

List of Figures

List of Tables

Contents

Abstract

Present thesis abstract here, typically there are no references, figures or tables in the abstract.

1 Introduction

1.1 Subsection Example

I am a subsection

### 1.1.1 Sub Subsection Example

I am a sub subsection

2 Literature Review

2.1 Introduction to Citations

Citations can be obtained from IEEE explore, ACM digital library or Google Scholar (along with multiple other sources). The format that this thesis template uses is a BibTeX file. In this thesis example it is named bibliography.bib. Inside the .bib file you can simply copy and paste a BibTeX entry. This allows for easy entry into the thesis. You can also directly link it with you Mendeley library.

To obtain a BibTeX entry in Google Scholar (Figure 1):

Figure 1: Referencing using BibTeX in Google Scholar
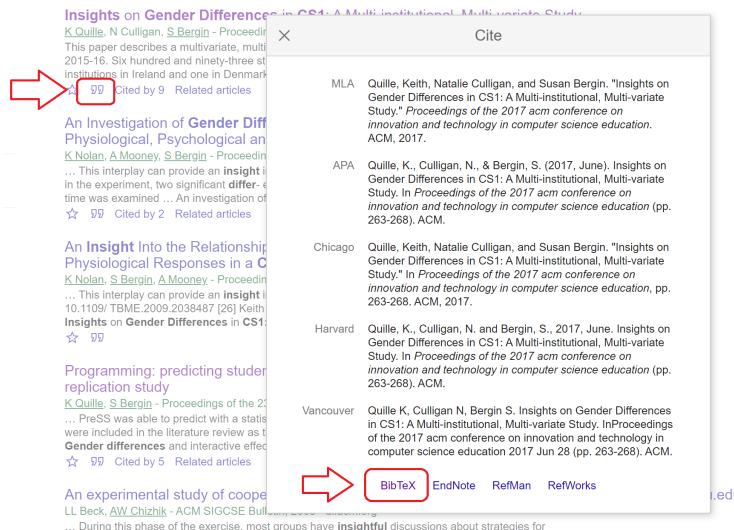
After selecting BibTex in Scholar, copy and paste the resulting BibTeX entry into the bibliography.bib file (Figure 2):

Figure 2: Scholar BibTeX

```
@inproceedings{quille2017insights,
  title={Insights on Gender Differences in CS1: A Multi-institutional, Multi-variate Study.},
  author={Quille, Keith and Culligan, Natalie and Bergin, Susan},
  booktitle={Proceedings of the 2017 acm conference on innovation and technology in computer science education},
  pages={263--268},
  year={2017},
  organization={ACM}
}
```

2.2 Example Citations

To reference a BibTeX entry (that is located in the bibliography.bib file), use:

```
\cite{}
```

This will present all of the citations in the BibTeX file. Once you select the reference, the Reference section will be automatically populated. Below is an example of using the BibTeX references:

Quille and Bergin 2019 is a citation from an academic journal.
Quille, Culligan and Bergin 2017 is a citation from a conference proceeding.

2.3 Further Reading

Overleaf documentation on Bibtex files:
```
https://tinyurl.com/yyabzfjb
```

3 Method

3.1 Referencing Tables and Figures

To reference a table or figure, you must include a label on the figure or table using:

`\label{}`

To use or reference a label you use:

`\ref{}`

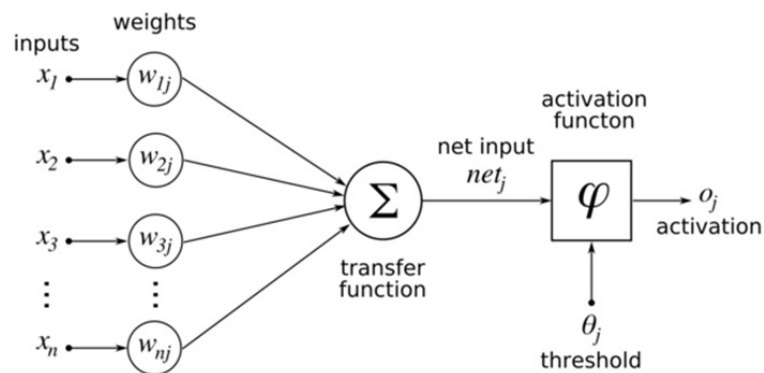Example:Table 1 presents the p values from test A, and Figure 3 shows the architecture of a perceptron.

3.1.1 Sample Table

Table 1: Comparison p values

Attribute	*p-value*	Significant
Model A	0.0521	N
Model B	0.6171	N
Model C	<0.00001	Y

3.1.2 Sample Figure

Figure 3: Perceptron (Artificial Neural Network)

3.2 Equation Example

Sample equations:

$$Accuracy = \frac{(TP + TN)}{(TP + TN + FP + FN)} \tag{1}$$

$$Sensitivity = \frac{TP}{TP + FN} \tag{2}$$

$$Specificity = \frac{TN}{TN + FP} \tag{3}$$

4 Results

5   Discussion

6   Conclusions

7   Appendices

References

Quille, Keith and Susan Bergin (2019). 'CS1 : how will they do ? How can we help ? A decade of research and practice research and practice'. In: *Computer Science Education* 29.2-3, pp. 254–282. ISSN: 0899-3408. DOI: `10.1080/08993408.2019.1612679`. URL: `https://doi.org/10.1080/08993408.2019.1612679`.

Quille, Keith, Natalie Culligan and Susan Bergin (2017). 'Insights on Gender Differences in CS1: A Multi-institutional, Multi-variate Study.' In: *Proceedings of the 2017 ACM Conference on Innovation and Technology in Computer Science Education.* ITiCSE '17. Bologna, Italy: ACM, pp. 263–268. ISBN: 978-1-4503-4704-4. DOI: `10.1145/3059009.3059048`. URL: `http://doi.acm.org/10.1145/3059009.3059048`.