# Title

A Report

Submitted to

The School of Engineering and Computing

National University

In Partial Fulfillment of the Requirements

for the Degree of Master of Science in Computer Science

By

Student name(s)

Month and year

Title

A report submitted to the School of Engineering and Computing, National University, in partial fulfillment of the requirements for the Degree of Master of Science in Computer Science by:

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Abstract

A comprehensive summary of the project report in one paragraph, not indented. Describe the report’s purpose and content accurately and concisely, include the most important points, and use specific language and key words that would be used by someone searching for articles in your area of research.

ACKNOWLEDGEMENTS

CHAPTER 1

INTRODUCTION

Start each chapter on a new page.

References (Samples)

Cohen, D. (1997). *Introduction to computer theory* (2nd ed.). New York: John Wiley & Sons. (book)

Dey, P., Amin, M., Sinha, B. R. & Farahani, A. (2010). One-stack automata as acceptors of context-free languages. *The Journal of Computing Sciences in Colleges*, Vol. 26(1), 118-123. (journal article)

Dey, P., Gatton, T., Amin, M., Wyne, M., Romney, G., Farahani, A., Datta, A., Badkoobehi, H., Belcher, R., Tigli, O., Cruz, A. (2009). Agile problem driven teaching in engineering, science and technology. *Proceedings of the American Society for Engineering Education-Pacific Southwest conference ASEE-PS*, San Diego, California, U.S.A., March 19-20, 2009. 62. (conference proceedings)

Kahneman, D. (2002). Maps of bounded rationality: A perspective on intuitive judgment and choice (Nobel Prize Lecture). In Tore Frängsmyr, (ed.). Les Prix Nobel. The Nobel Prizes 2002, 416-499, Retrieved March 12, 2008 from http://nobelprize.org/nobel\_prizes/economics/laureates/2002/kahneman-lecture.html

(document from a web site)

Appendices

Label each appendix separately, and start each on a new page.