

SIMULATION OF CELLULAR AUTOMATA ON GRAPHICS PROCESSING UNITS

CHITPASEUTH SOMPHET

SCHOOL OF COMPUTER ENGINEERING 2011/2012

NANYANG TECHNOLOGICAL UNIVERSITY

SCE11-0031 SIMULATION OF CELLULAR AUTOMATA ON GRAPHICS PROCESSING UNITS

Submitted in Partial Fulfillment of the Requirements for the Degree of Bachelor of Computer Engineering of the Nanyang Technological University

by

CHITPASEUTH SOMPHET

SCHOOL OF COMPUTER ENGINEERING 2011/2012

Abstract

The abstract is a highly condensed version of the whole project. Its function is to draw the reader's attention to the main points or findings of the project. It should include: (a) (b) (c) (d) (e) A concise statement of the problem investigated, hardware to be designed, or software to be written Purpose of the project A concise description of how the information was collected, the design methodology or the software approach used in the project The results A concise summary of conclusions and recommendations. The ordering of the above varies according to the type of readers and the purpose of the report. The general rule is to start with information that is most important or interesting. This part of the report should be written only after the whole report is completed and not before. The abstract can be broken up into a small number of paragraphs but the length is usually limited to one A4 page. Single line spacing is allowed in the Abstract.

Acknowledgments

The writer uses this section to thank all those he or she is indebted for guidance, financial or any other assistance rendered during the course of the project.

Contents

Abstract	i
Acknowledgments	ii
Contents	iii
List of Tables	iv
List of Figures	\mathbf{v}
1 Introduction	1
1.1 Background	1
1.2 Purpose and scope	1
References	2

List of Tables

1 1	A simple	tabla																									-
1.1	A simple	table.	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		-

List of Figures

1.1	NTU logo																													1
T • T	11101050	 	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	_

Chapter 1

Introduction

1.1 Background

1.2 Purpose and scope

1	2	3
4	5	6
7	8	9

Table 1.1: A simple table



Figure 1.1: NTU logo

First eref Knuth (1992) asdfsdf

Second Sanders and Kandrot (2010) asfdasdf

Third Graham, Knuth, and Patashnik (1989) asfdsf

fourth Kirk and Hwu (2010)

Knuth (1992)

References

- Graham, R., Knuth, D., & Patashnik, O. (1989). Concrete mathematics. Reading, MA: Addison-Wesley.
- Kirk, D. B., & Hwu, W.-m. W. (2010). Programming massively parallel processors: A hands-on approach (1st ed.). San Francisco, CA, USA: Morgan Kaufmann Publishers Inc.
- Knuth, D. (1992). Two notes on notation. Amer. Math. Monthly, 99, 403–422.
- Sanders, J., & Kandrot, E. (2010). Cuda by example: An introduction to general-purpose gpu programming (1st ed.). Addison-Wesley Professional.