Image Processing using CUDA

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**By**

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**Word count: XXXX**

This document is a template for your guidance. You don’t have to stick to it precisely. It may not suit your particular project. Modify it if you need to – but please discuss with your supervisor before making substantial changes to the organisation and content. Make sure you write about the all the individual elements mentioned in the assignment specification.

Paragraphs in red, like this one, are instructions and extra information. You must delete them before submitting your report.

This template document has a number of paragraph styles predefined. If you use them (‘Heading 1’, ‘Heading 2’ and ‘Heading 3’) and don’t alter them, then your report will automatically have properly numbered paragraphs and your table of contents will be automatically generated with the right page numbers. Use ‘Normal’ as the style for general text paragraphs in your document.

On this page (and I *really* hope this is obvious) you must replace the words “The Title Of Your Project”, “Your Full Name Here” and “202100000” with the correct information. You’d be surprised how often people forget to do this. Don’t be one of them.

You must also replace “XXXX” with the actual word count (excluding acknowledgements, abstract, table of contents, references and appendices) of your document.

This table of contents (TOC) is automatically generated by Word, based on paragraphs with styles of ‘Heading 1’, ‘Heading 2’, ‘Heading 3’ and ‘Unnumbered Heading’. It should automatically update with the correct page numbers when you load the document, but you can force it to do so at any time by right-clicking on it (the whole TOC will turn grey) and selecting “Update Field” or pressing F9.

If you manually edit the table of contents, you may find that either your changes will get overwritten or it will no longer update automatically. It’s a pain to keep a table of contents up to date manually, so you are advised not to edit it!

Delete these red paragraphs!

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# Project background and purpose

## Introduction

Briefly summarise the project, to introduce it to the reader before the more detailed sections later on.

Delete the red paragraphs and replace this one with your content (use the “Normal” paragraph style).

## Objectives

Why is this a useful project? What does it seek to achieve? What is the motivation for it (not your motivation for doing the project)? What are the primary objectives, and what secondary objectives may be achieved if there is time? Make sure these are SMART objectives.

Delete the red paragraphs and replace this one with your content (use the “Normal” paragraph style).

## Scope

Remember that a project is a well-defined piece of work. In this section, explain what is included in the project, and just as importantly, what is not? Think about what someone reading the description might expect, and if there are elements which might seem obvious, but you're not going to do, make sure you say so.

Delete the red paragraphs and replace this one with your content (use the “Normal” paragraph style).

## Deliverables

What artefacts (hardware or software) or results will the project deliver? How will you decide whether the project has met its objectives? Be clear and specific.

Delete the red paragraphs and replace this one with your content (use the “Normal” paragraph style).

## Constraints

Are there *externally-imposed* requirements which you must comply with? What are they, and how will they impact on the project? Note that you having already decided to use a specific technology is not an externally imposed constraint – it’s you not making that decision with proper consideration. Note that there may not be any constraints on your project. Delete this section if that is the case.

Delete the red paragraphs and replace this one with your content (use the “Normal” paragraph style).

## Assumptions

If there are unknown elements or missing information relevant to the project, what assumptions will you make to account for these? How are these assumptions justified?

Delete the red paragraphs and replace this one with your content (use the “Normal” paragraph style).

# Project rationale and operation

## Project benefits

What benefits will a successful project bring, and to whom? Note that this is about the project’s content and purpose, not the fact that you are doing a project for your degree.

Delete the red paragraphs and replace this one with your content (use the “Normal” paragraph style).

## Project operation

How will you operate the project? Will you use a particular methodology for it and for any software or other development? How will you measure the success of your choice?

Delete the red paragraphs and replace this one with your content (use the “Normal” paragraph style).

## Options

What options are available to you for the tools, techniques and design parameters of your project? How will you evaluate them and make the best selection?

Delete the red paragraphs and replace this one with your content (use the “Normal” paragraph style).

## Risk analysis

What risks might affect the outcome of your project or its stakeholders? How severe are they, and what steps will you take to mitigate against them?

Delete the red paragraphs and replace this one with your content (use the “Normal” paragraph style).

## Resources required

What resources will you need for the project? Are any non-standard? Are they already available? What effect will it have if they are not available or are delayed, and how would you manage that?

Delete the red paragraphs and replace this one with your content (use the “Normal” paragraph style).

# Project methodology and outcomes

## Initial project plan

## Tasks and milestones

Present a realistic task list for the entire project, broken down to a suitable level of detail. Indicate milestones against which progress can be monitored. Make sure you include all the deliverables you mentioned earlier.

Delete the red paragraphs and replace this one with your content (use the “Normal” paragraph style).

## Schedule Gantt chart

Present a Gantt chart showing a schedule for all tasks, milestones and deliverables. Show dependencies amongst tasks. If you are intending to use SCRUM or other agile methods, be sure to go to the lectures involving project planning. Your time plan should cover the entire period of your project (and will therefore include the PDD preparation as a task and the PDD itself as a deliverable).

Delete the red paragraphs and replace this one with your content (use the “Normal” paragraph style).

## Project control

How will you manage the project day-to-day? How will its performance be monitored? How will you judge if it has been successful?

Delete the red paragraphs and replace this one with your content (use the “Normal” paragraph style).

## Project evaluation

How will you evaluate the project’s artefacts and overall outcomes? What user evaluation will you do? Do not underestimate the importance of this, and include clear details of how you will do the evaluation.

Delete the red paragraphs and replace this one with your content (use the “Normal” paragraph style).

# References

List any sources you have used for your background and introduction here. Make sure you use the proper referencing format.

Delete the red paragraphs and replace this one with your content (use the “Normal” paragraph style).

# Appendix a

You may use one or more appendices to add useful reference information which may be relevant to other sections of the report. Do not use appendices simply as a way of writing more than will fit into the main document word count. If you don't need any appendices, then delete this whole section

Delete the red paragraphs and replace this one with your content (use the “Normal” paragraph style).