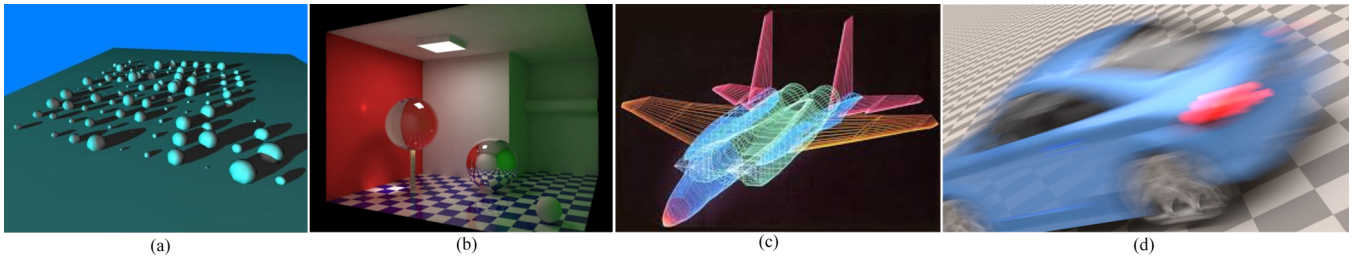
The Title of Your Report Goes Here

Students Name *
Edinburgh Napier University
Computer Graphics (SET08116)



(a) (b) (c) (d)

Figure 1: *Place a teaser image at the top of your report to show key examples of your work (e.g., multiple screenshots of the different test situations) - Every figure should have a caption and a description below it. For example, each figure is labelled and explained: (a) shadows, (b) global illumination, (c) wireframe, and (e) motion blur.*

Abstract

The abstract is typically a 'single paragraph'. The abstract is the first thing people read when they encounter your report; hence, it is crucial that it outlines all the important aspects of your document. Make your abstract incredibly concise and clear. You start with the aim and end with why your report is interesting. Briefly explain why your report is valuable and how you have evaluated it. Keep your abstract small. Typically, the abstract should be approximately 100-200 words.

Keywords: radiosity, lighting, global illumination

1 Introduction

The introduction sells your computer graphics submission. It tells the reader about the key effects and motivation. It tells the reader about why it is important. Your introduction should be clear well defined paragraphs (e.g., [Day and Gastel 2012]).

- What key effects are you showing?
- What is the motivation? (What's so interesting and important?)
- Why is it hard? (e.g., why do naive approaches fail?)
- Where has the effect been used before or what are you doing differently? How does yours differ?
- What's your approach? How do you implement your different effects? Are their any specific limitations?
- (Optional) How the rest of the report is structured.
  e.g., The rest of this report is structured as follows: first we discuss the related work in section 2, and then describes the implementation in Section 3. Section 4 describes how we intent to evaluated our submission. Section 5 gives the conclusions.

Starting examples: Computer graphics lighting refers to the simulation of light in computer graphics. This simulation can either be extremely accurate, as is the case in an application like Radiance which attempts to track the energy flow of light interacting with materials using radiosity computational techniques. Alternatively, the simulation can simply be inspired by light physics, as is the case with non-photorealistic rendering. In both cases, a shading model is used to describe how surfaces respond to light. ....

2 Related Work

Refer to literature on the particular computer graphics effect you want to synthesize (e.g., published articles, books, conference proceedings, web articles) provide a comprehensive review - and use the correct citation format, e.g., [Sako and Fujimura 2000].

Related work should finish with a summary paragraph - emphasising the crucial similarities or differences between existing methods presented in the literature. For example: (1) you might want to modify the technique so it is less accurate but more efficient; (2) or you combine different techniques from different approaches; (3) or you are simplifying the algorithm to make it run with different outcomes.

3 Overview

Brief overview of the core principles and techniques behind your effect. This should be reflected in your final implementation, so consider what you will actually be implementing. What components make up the effect and how are they connected.

4 Methods/Techniques

In this section, you should put together some of the technical details of your graphical scene. This will help when developing your physics-based graphical scene later.

- Technical Analysis This section analyses the technical requirements of your graphical scene. The goal here is to describe the main software development tasks, the risks involved, and any external libraries you are using.
- Major Software Development Tasks What are the major pieces of development to make the software work? Identify the main tasks from the graphical scene design, particularly

*e-mail:29938203@napier.ac.uk

items you feel will be difficult to implement. List these here so you can approach these tasks individually.

- Risks What are the risks in your development? Consider which pieces of functionality will be difficult to implement, and what are the options if you cannot achieve them.
- External Libraries Are you using any external libraries or resources to implement your graphical scene? If you are using any libraries outside the ones developed in the practical sessions, these will need to be described here.

Equations should be numbered and in the correct format, e.g., Equation 1 below:

$$\sum_{j=1}^{z} j = \frac{z(z+1)}{2} \tag{1}$$

Furthermore, if you include an equation, ensure you explain what each of the variables are (e.g., F is force, m is mass, and a is the acceleration).

4.1 Common Mistakes

A list of common mistakes you should avoid:

1. Don't using 'I' or 'Me'
2. Each paragraph should be clear and focuses with multiple sentences that help make your point - avoid lots of single line paragraph sentence
3. Make sure the citations are done using the correct formatting (i.e., .bib file and let LaTeX generate the references)
4. Every figure should have a caption, explaining what the picture is and what the reader should be looking at (i.e., what is important about the figure, what does it show)
5. 'Every' figure should also be referenced in the body of the main text (e.g., see Figure 1)
6. Use a capital letter for references (e.g., 'F'igure x, 'E'quation x, 'T'able x...)
7. Equations should be numbered, and referenced in the text. Furthermore, ensure each of the variables in the equation are explained

5 Conclusion

The report should finish with a summary/conclusion to give a brief overview of what the reader should remember most. What was most important?

References

DAY, R., AND GASTEL, B. 2012. *How to write and publish a scientific paper*. Cambridge University Press. 1

SAKO, Y., AND FUJIMURA, K. 2000. Shape similarity by homotropic deformation. *The Visual Computer 16*, 1, 47–61. 1