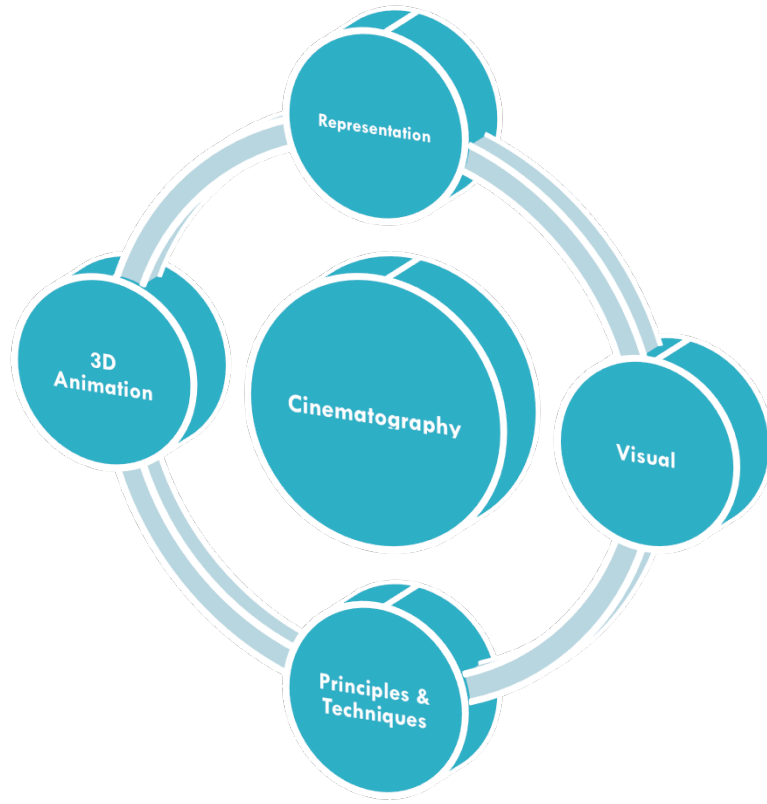# VISUAL CINEMATOGRAPHY

Final Year Project 2012 | Gary Burke

Project Review

□ "To represent the principles and techniques of cinematography visually through 3D animation"
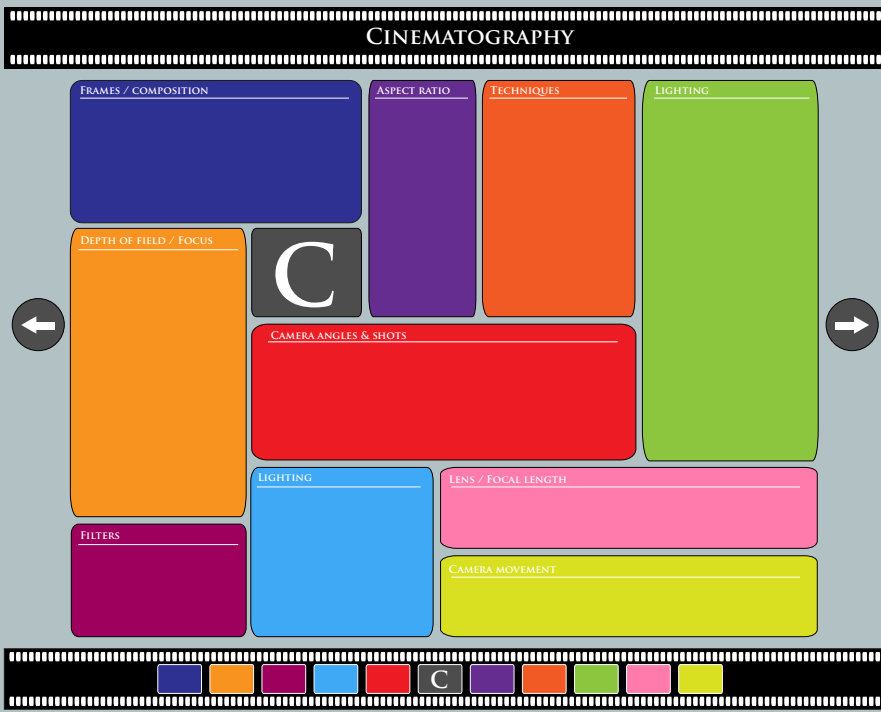
Goals

- Visualise cinematography
  - 3D Animation
  - Website
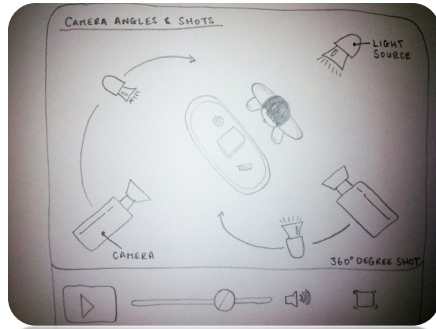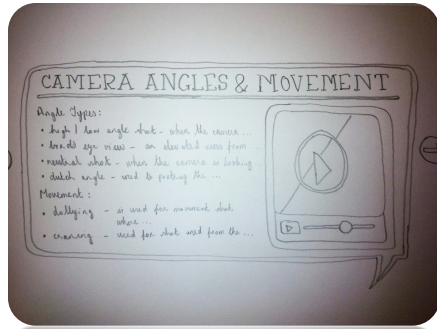 - Represent key areas
- Show technical skills
  - 3D Animation
 - Video Production
  - Website Development

Cinematography

'the art or science of motion-picture photography'…'the art of filming a scene'

Source: The Harvard Crimson – www.thecrimson.com

'The art of capturing images either electronically or on film stock through the application of visual recording devices and the selection and arrangement of lighting'

Source:

The New York Film Academy – www.nyfa.edu

Cinematography

Frames / composition

Aspect ratio

Techniques

Lighting

Depth of field / Focus

C

Camera angles & shots

Lighting

Lens / Focal length

Filters

Camera movement

The Process

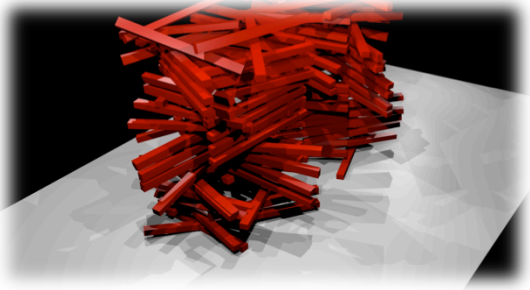Idea > Design > Development

Research, Ideas & Design

Important: The areas covered began with 13, then 10, and was eventually narrowed down to 6 following research and supervisor discussion.
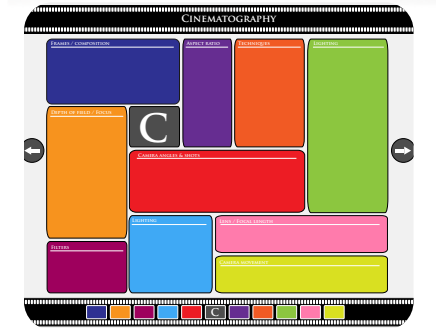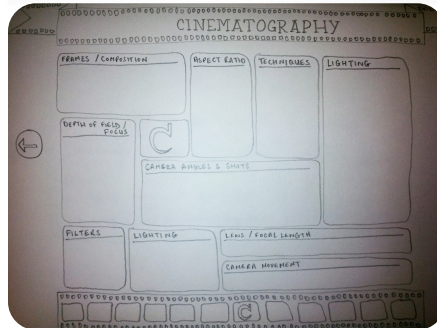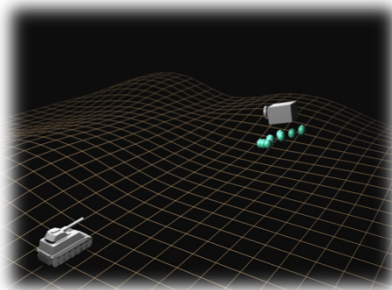
- Filters
- Aspect Ratio
- Focus
- Photography
- Tips & Tricks
- Other Techniques
- Frames

- Film Stock
- Lens
- Lighting
- Depth of Field
- Camera Movement
- Camera Angles & Shots
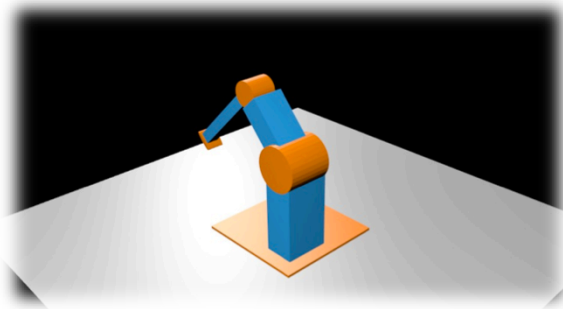
6 Areas

Aspect Ratio
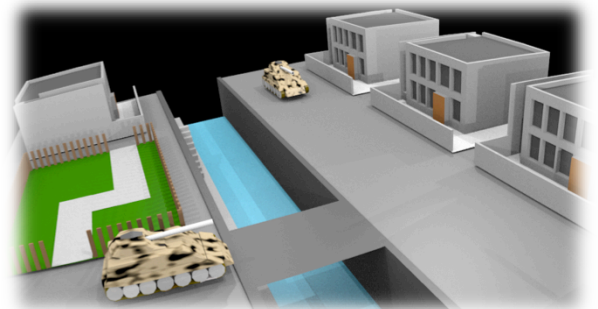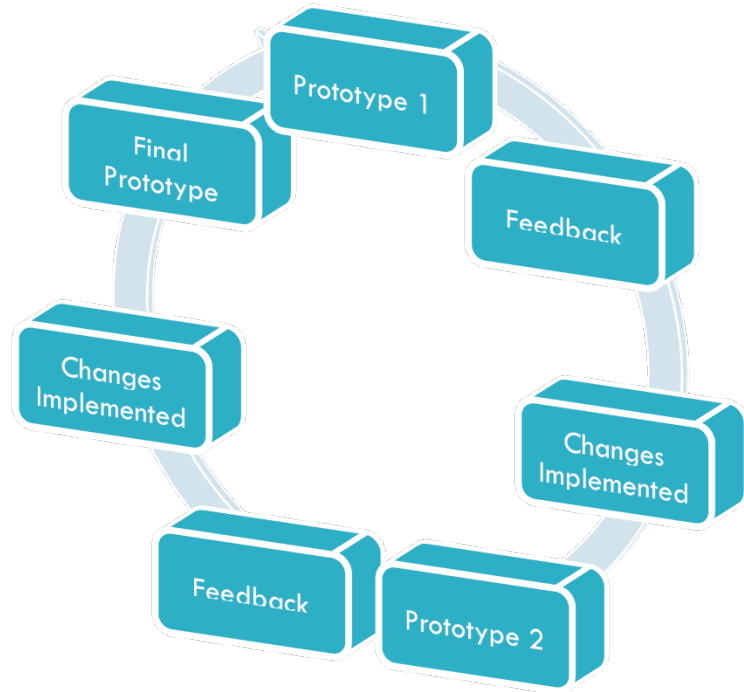
Camera Angles & Shots

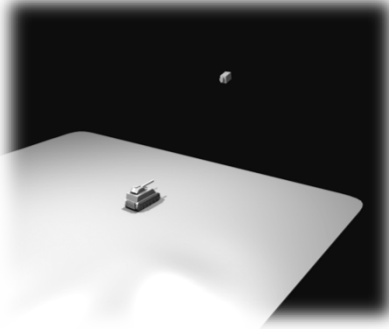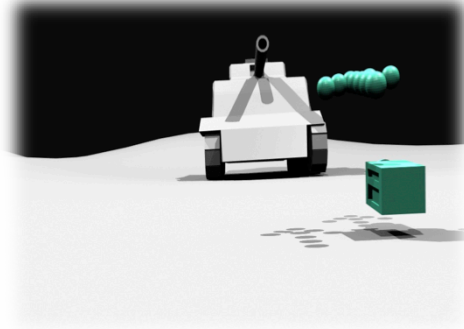Camera Movement

Depth of Field

Lighting

Focal Length

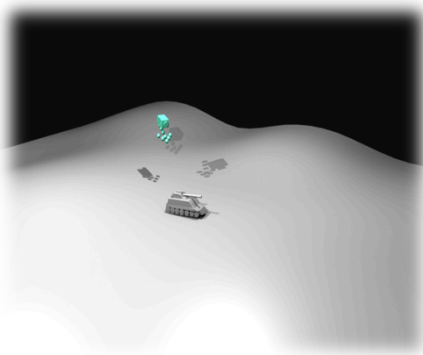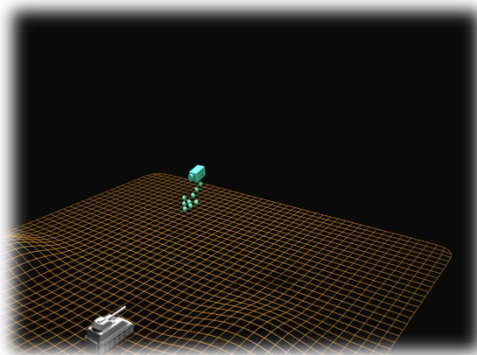# Development
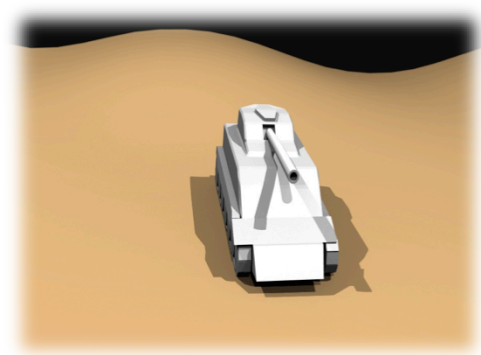
Example – Camera Angles & Shots
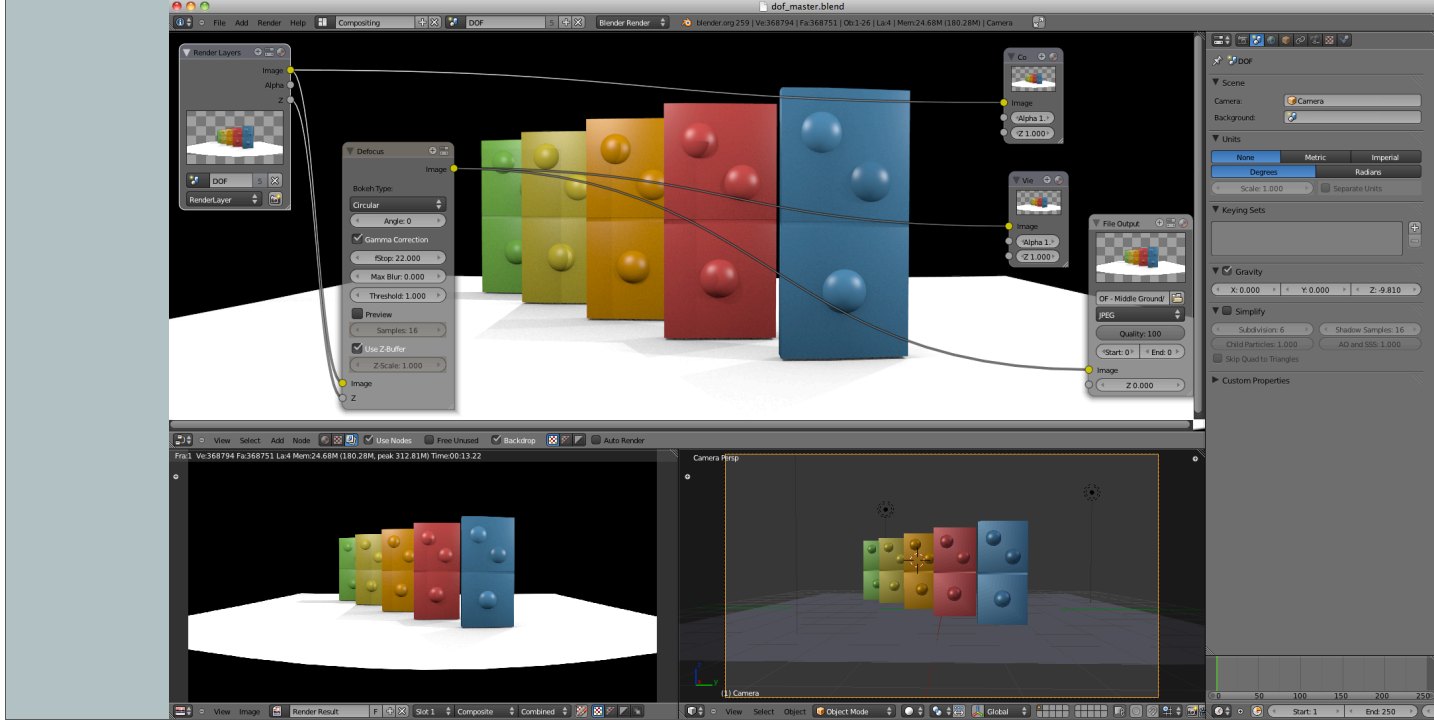

Prototype 1

Prototype 2

Prototype 3

Prototype 4

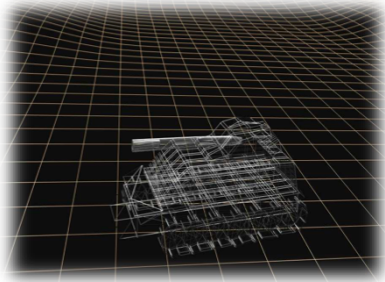Prototype 5

Implementation
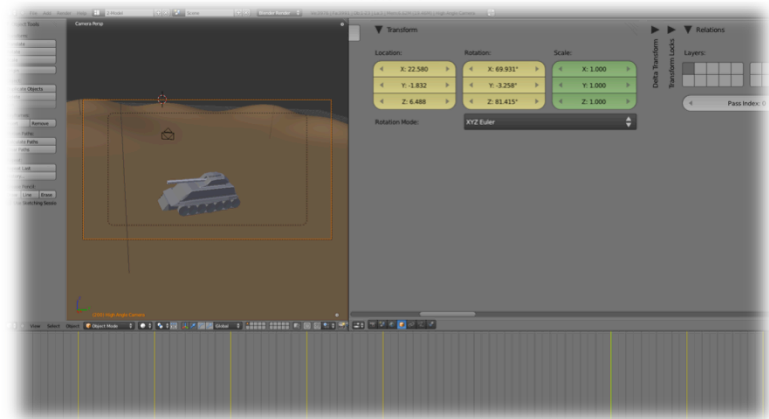
Blender > Motion > Final Cut Pro

Blender

Modeling

- Shaping
- Extruding
- Texturing
- Lighting
- Camera Work

Animation

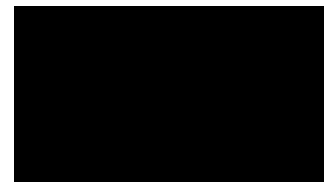- Keyframing
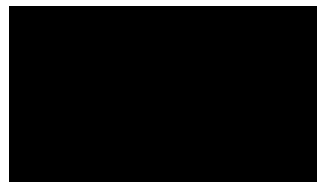- Object Physics
- Rendering
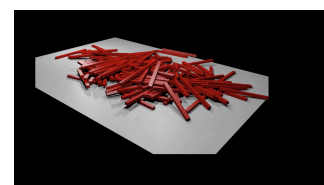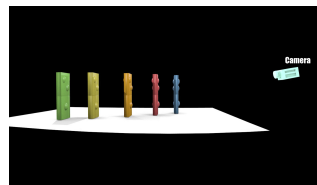
Final Cut Pro & Motion

Final Cut Pro

- Editing
- Audio
  - Voiceover
  - Background Music
- Video / Audio Effects
  - Transitions
  - Filters
- Exporting
  - Web

Motion

- Intro Titles

- Intro Animations

Final Product

Results > Showreel > Website

Final Results

- ☐ 6 Animation Videos (Aspect Ratio, Camera Angles & Shots, Camera Movement, DOF, Focal Length, Lighting)
  - ☐ Visualising and Describing key areas of cinematography

- ☐ Between 3 - 4 minutes each
  - ☐ Approx. Total = 20 minutes

- ☐ Animations (Models, Scenes, Cameras, Audio, Editing, Rendering, Exporting)

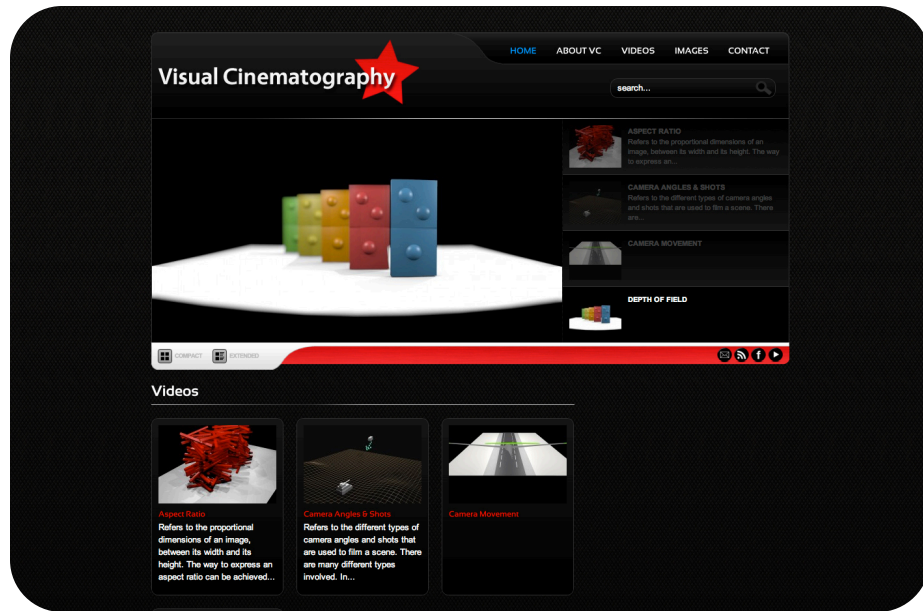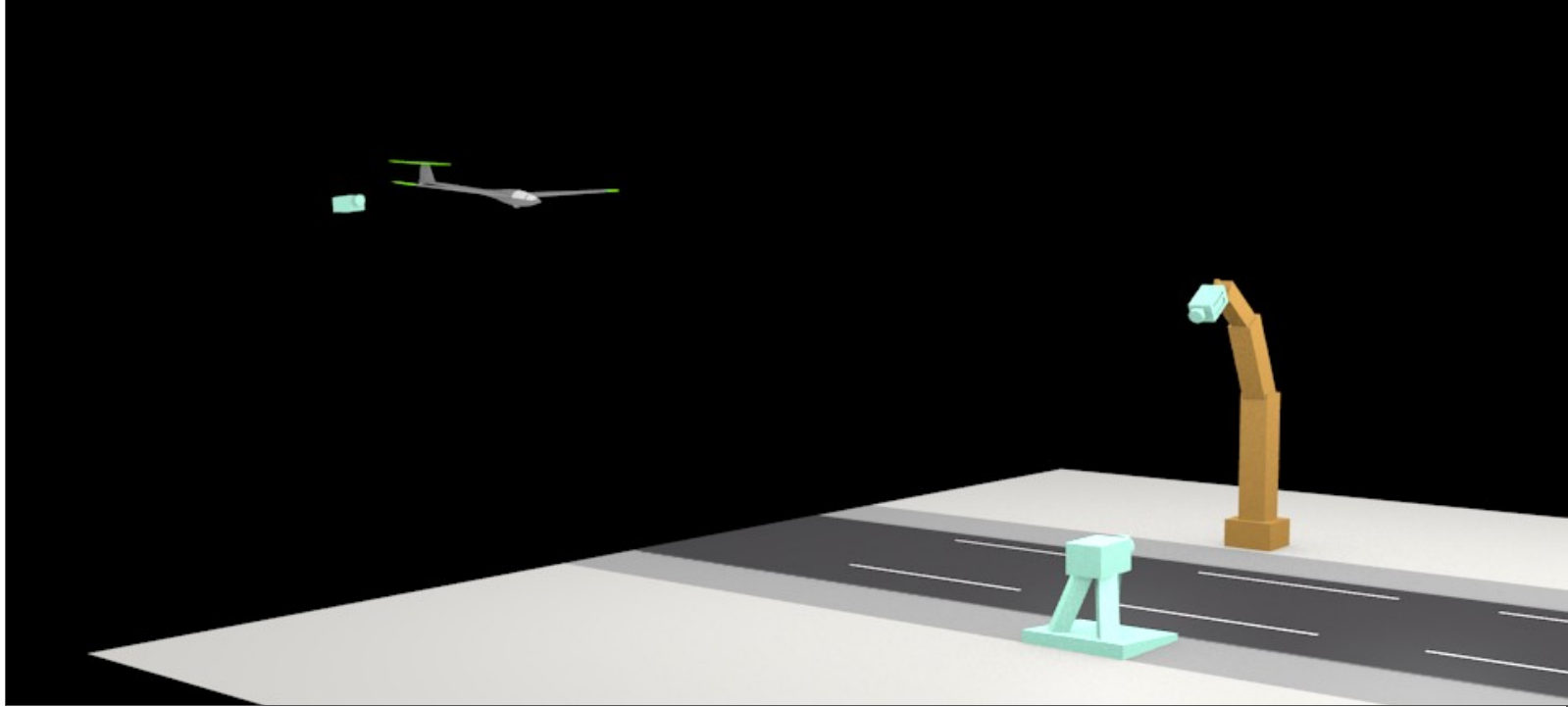- ☐ Website (www.visualcinematography.com)

Videos

Camera Angles & Shots
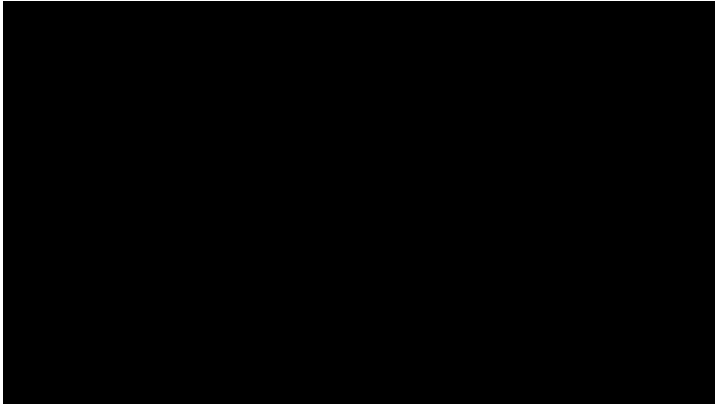
Aspect Ratio

Website

visualcinematography.com

Conclusions

Lesson Learned > Technical Skills

Technical Skills & Lessons Learned

- Knowledge of Cinematography
  - Principles, Techniques & Features

- 3D Animation Design & Development
  - 3D Models, Scenes, Rendering Techniques

- Video Production / Website Development

- Project Management
  - Planning
  - Researching
  - Time Management

Conclusions

- The Topic
  - Research key areas
  - Understand tasks involved
  - Why is it used?
  - How does it effect filmmaking?

- Animations
  - Learn the software
  - Plan each process involved
  - Have a clear idea
  - Time Management

CGI and Cinematography

Gary Burke

May 2012

Submitted in part fulfillment for the degree of

Bachelor of Arts (Honours) in Creative Digital Media

Table of contents

Thesis

CGI and Cinematography

Thesis

CGI

- Techniques
- Integration with live action
- CGI Cameras

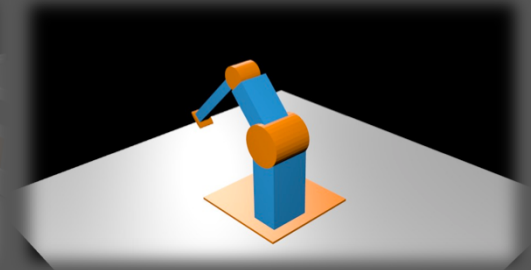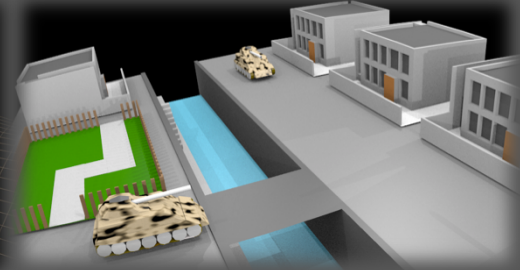## Cinematography

- Fundamentals
- Techniques
- Principles

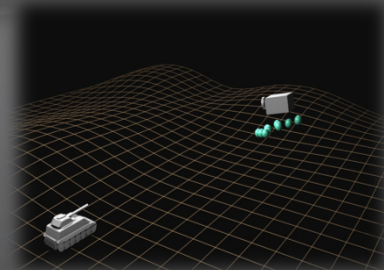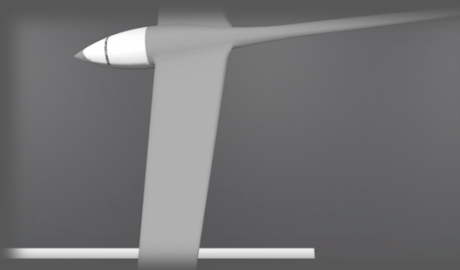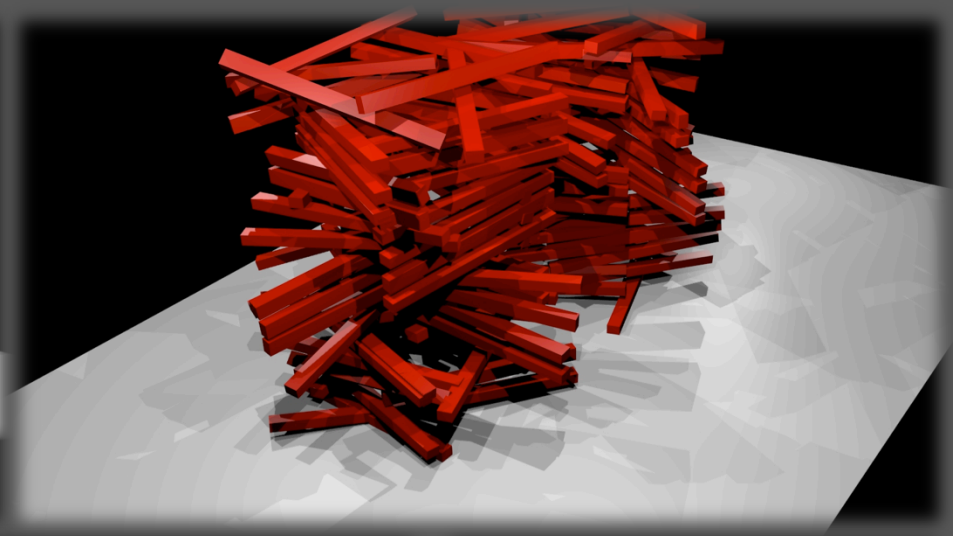# Thesis

Impacts of CGI on Cinematography

- Similarities between both
- Camera Control
- Camera Footage
- Rendering Footage

QUESTIONS?

Final Year Project 2012 | Gary Burke