



Faculty of Media and Communication

Coursework Assignment Brief

2017/18

MSc Computer Animation and Visual Effects

M

CGI Techniques

Title of Brief: CGI Techniques Project

This assignment is a formal element of coursework worth 100% of the overall unit mark (Each piece of coursework may vary according to the unit)

THE BRIEF

Introduction

This project will be combined into a larger project as part of the Animation Software Engineering unit. Your task for the CGI Techniques unit is to research and implement appropriate animation / computer graphics algorithms required for the major animation project you are developing.

Sample project ideas can be found here <http://nccastaff.bournemouth.ac.uk/jmacey/ProgProj/> however you may choose a project of your own which can be discussed with your academic advisor.

Part 1 Background research

The first part of the project is a written report outlining the current research and techniques used for the area your are developing software for. This is worth 40% of the unit grade (approx. 2000 words). You should reference current papers and research in the area based on publish academic papers where relevant. This report should be submitted to myBU and may be referenced in your ASE design.

Part 2 Final Submission

The final submission will be graded as part of the ASE code submission you should outline in a small report where the following areas are covered in the programming part of the project

Use of appropriate CGI Techniques 20%

Implementation of Techniques 20%

Project Specific (i.e. efficiency, new use of algorithms etc) 20%

You must acknowledge your source every time you refer to others' work, using the Harvard System (Author Date Method). Failure to do so amounts to plagiarism which is against University regulations. Please refer to www.bournemouth.ac.uk/library for the University's guide to citation in the Harvard style. For more information please read the code citation guide here <http://nccastaff.bmth.ac.uk/jmacey/NCCACodingStandard/Citation.html>

In addition to this any 3rd party code used in the program must be suitably referenced. It is assumed you will use the NCCA GraphicsLibrary code or examples from the lectures so these need not be referenced. However your assignment must be suitably different from any examples given out in the class.

Related Learning Outcomes

1. demonstrate a mastery of key computer graphics techniques employed in computer animation production and the use of computer animation tools.
2. display a comprehensive understanding of the languages used to discuss the moving and still image, art science and technology.
3. demonstrate the ability to autonomously develop solutions to problems arising in computer animation productions.
4. display the ability to effectively communicate and critically analyse highly technical areas of the moving image with peers, supervisors and others.

SUBMISSION DETAILS

You should submit using myBU and GitHub :

- Essay submitted to Turnitin via myBU.
- Documentation of how to operate the submitted program (git README.md)
- Source Code via GitHub
- A Video of the program in Operation (via myBU)
- Description of the programming languages and techniques used. For example classes interface that allows object/scene management, set-up calls, data input/output calls, and class diagrams. (myBU and github)

DEADLINE

Essay Submission Friday 17th November 2017 Turnitin (via myBU)
Final Submission Friday 26th Jan 2018 myBU / GitHub (in conjunction with ASE assignment).

HELP AND SUPPORT

- You must acknowledge your source every time you refer to others' work, using the **Harvard Referencing** system (Author Date Method). Failure to do so amounts to plagiarism which is against University regulations. Please refer to www.bournemouth.ac.uk/library for the University's guide to citation in the Harvard style. In addition you must also cite any 3rd part code used within the project using the coding standard here <http://nccastaff.bournemouth.ac.uk/jmacey/NCCACodingStandard/Citation.html>
- Students with **Additional Learning Needs** may contact Learning Support on www.bournemouth.ac.uk/disability_support.
- General **academic support** is available via the Academic Skills community on myBU.
- **Additional support** is provided by the School. International postgraduate students should contact Sue Court, all other undergraduate and postgraduate students should contact Marian Mayer via Christine Clack, to make an appointment. They are both based in W218.
- If you have any valid **mitigating circumstances** that mean you cannot meet an assignment submission deadline and you wish to request an extension, you will need to complete and submit the Mitigating Circumstances Form for consideration to your Programme/Framework Administrator together with appropriate supporting evidence (e.g., GP note) normally before the coursework deadline. Further details on the procedure and the mitigating circumstances form can be found at www.bournemouth.ac.uk/student/mitigating. *Please make sure you read these documents carefully before submitting anything for consideration.*
- Please be mindful that certain actions carry risk which should be adequately assessed before undertaking the activity. Please refer to University/Faculty guidance for clarification.

Disclaimer: The information provided in this assignment brief is correct at time of publication. In the unlikely event that any changes are deemed necessary, they will be communicated clearly via e-mail and myBU and a new version of this assignment brief will be circulated.

Version: 1
(Updated
September 2017)