

## **DEVELOPING 3D CALLIGRAPHIC BRUSHWORKS BASED ON CHINESE CALLIGRAPHY FOR MARTIAL ART ACTIONS IN 3D SPACE FOR ANIMATION**

### **STATEMENT OF RESEARCH PROJECT**

#### Research Questions

- (i) How to incorporate the delusive quality of Chinese calligraphic brushwork into a 3D animated figurative actions in space?
- (ii) What are the advantages of incorporating the delusive quality of Chinese calligraphy in digital animated figurative action in space?
- (iii) What are the most common types of Chinese calligraphic brushwork that will can be categorized to fulfil the need in question (i)?
- (iv) What are the advantages and/or issues that need to be resolved when colors (with additional attributes of hue and saturation) are incorporated for the above application in 3D space?

### **SCOPE OF WORK FOR SELECTED PHD STUDENT**

PhD student works on study and understanding of basic Chinese calligraphy concepts and thereafter enables him/her to develop software that works with Maya for creating delusive brushworks in 3D space for animation purpose. Summarized tasks are listed below:

- To develop Maya shaders, with Python programming and to work closely with Co-supervisor (Ng Woon Lam) who has knowledge of Chinese calligraphic concepts and visual art research students (likely MA research students from School of Art, Design and Media)
- Support application training and workshop after software and animation demonstration is completed.
- To collaborate with Supervisor and Co-supervisor on conference presentation and paper publication
- To work closely with MA research students so as to connect the developed Maya shaders and all related application software for animation purposes.
- To assist in final exhibition and publication of all findings.
- To conduct small workshop to share the findings with students and researchers who are interested. This process will allow more animation students and researchers to explore this newly developed software as well as the concept behind for real life application in animation movies.