# 2017 YCCSA SUMMER SCHOLARSHIP PROJECT SUBMISSION

This form is for prospective project supervisors to submit their projects to be included in the YCCSA Summer Scholarships Programme for 2017.

It is the purpose of the YCCSA Summer School that any projects submitted are novel and interdisciplinary in nature.

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| **Date** | *6th January 2017* |
| **Supervisors' Names and Departments / Affiliation and Contact Email** | *Dr Gareth Beale (Archaeology)*<br>*Dr Florian Block (Theatre Film and Television)* |
| **Project Title** | *Innovative Experiences of Archaeological Imaging* |
| **Project Description** | *The use of Reflectance Transformation Imaging (RTI) for archaeological imaging has gathered pace in recent years and has transformed the use of digital imaging within archaeological research. The technique is entirely open source and the capture process uses only affordable and widely available technology. Despite the great promise of the technology (as demonstrated by the award-winning visualisation of the Star Carr Pendant see link below) there has been very little emphasis on the development of new interfaces or methods of engaging with archaeological RTI data.*<br><br>*We would like to work with a summer school student to develop new user experiences of RTI data using Virtual and Augmented Reality. We are seeking to create an immersive and embodied interactive experience resembling a virtual 'lab environment' within which users can engage with RTI data in an exploratory way. This work will be of enormous benefit to the Archaeological research community and has the capacity to greatly enhance experiences of archaeological data amongst new communities of users.*<br><br>*The student will be co-supervised by Gareth Beale from the University of York's Centre for Digital Heritage and Florian Block from the Interactive Media group in the department of Theatre Film and Television. Students will be embedded within the DC Labs community and will have access to RTI users within the Department of Archaeology who will actively support them in their development work.* |
| **Required Skills** | *A short synopsis of the necessary skills for the summer student(s). Please be careful to specify the skills rather than requiring students to have followed a particular degree programme. Specify required skills separately for each student in a group project.*<br><br>*Ability to programme in C# and/or Javascript as well as understanding of image manipulation and computer graphics are essential. Experience of using Unity for the development of VR environments is desirable.* |

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| **Supervision and Collaboration Arrangements** | *Beale will supervise the archaeological and digital imaging elements of the project. Block will supervise the user experience and interface design elements of the project. VR elements of the project will be co-supervised. Either Block or Beale will be available throughout the duration of the Summer School and will arrange regular meetings with the student.* |
| **Project Dates** | *The summer school runs for 9 weeks, starting on Monday, 10 July 2017 and finishing on Friday, 8 September 2017.* |
| **Other Information** | *Anything that doesn't easily fit above.* |
| **References** | *Please include at least one relevant source of information.* <br><br> Links to information about RTI: <br><br> - http://culturalheritageimaging.org/Technologies/RTI/ <br><br> A paper demonstrating the Archaeological use of RTI: <br><br> - Milner, N. et al. (2016). A Unique Engraved Shale Pendant from the Site of Star Carr: the oldest Mesolithic art in Britain, Internet Archaeology 40. http://dx.doi.org/10.11141/ia.40.8 |

When complete, please email the form to sarah.christmas@york.ac.uk