

## **APPLICATION FOR RESEARCH ETHICS APPROVAL**

Version 4 - FINAL – 27/01/15

All researchers should be familiar with the University's Research Ethics Policy and associated procedures, available [here](#). No element of a research project which falls under the scope of the Policy should begin before written approval has been given.

All research projects are subject to ethics approval. This form enables researchers to either:

- 1) declare a project out of scope. The form incorporates a short cut for this.
- 2) provide more detail on ethical considerations. Research ethics approval is required for research projects that:
  - directly involve people in research activities, through their physical participation, eg. interviews, questionnaires, surveys, observational research, requiring the active or passive involvement of a person;
  - indirectly involve people in the research activities, through their provision of or access to personal data and/or tissue
  - involves people on behalf of others (eg. legal guardians of children and the psychologically or physically impaired and supervisors of people under controlled environments (eg. prisoners, school pupils).

There are special arrangements for research in the health and when it involves animals, and guidance should be sought direct from the Committee in these cases.

Convening an event, such as a conference or workshop, only requires research ethics approval where research takes place, eg. leading to an identifiable research output, and only that specific part of the event where the research is taking place.

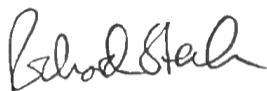
Please note that all events (seminars, conference, workshops, etc) should be discussed with your Director of Department taking into consideration any professional ethics or reputational concerns.

IF YOU ARE UNSURE, YOU SHOULD ASSUME RESEARCH ETHICS APPLIES. IN THIS CASE SEEK GUIDANCE FROM THE COMMITTEE BEFORE CONTINUING.

Part A – Overview of the project							
1	Title of the project	Extending Client Side Prediction Methods in Networked Multiplayer First-Person Shooter Games to Include Level Information.					
2	Briefly summarise the project's aims, objectives and methodology	The project proposes that dead reckoning methods amended to include level movement data trends, both to combine with the acceleration factor in the movement projection, and to dynamically alter the error threshold of client side prediction used to prompt network packet updates, will result in a more accurate prediction model than a standard client side prediction method that uses dead reckoning. The data trends will be formed from many artificial intelligence controlled 'bot' simulations, and the hypotheses tested by an accuracy comparison between this paper's proposed method using the data trends, and a standard client side prediction method that uses dead reckoning. These prediction methods will be simultaneously run several times per play test of a participant moving through the level.					
3	Start and end dates						
4	Principal Investigator	Title: Mr Name: Richard Steele Department: BSc Computing for Games					
5	Other key investigators	Title	Name	Post	Role in project	Organisation	Department
Part B – Does the project require research ethics approval?							
6a	Does any part of the project constitute research, ie. a process of investigation leading to new insights, effectively shared (eg. identifiable research output)?  If you answer No to this question please provide a rationale here (max 100 words)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know  If Yes or don't know, continue to 6b. If No, the project is out of scope. Go direct to 18a.					
6b	Does your research involve participants of any type, ie. humans or animals, directly or indirectly? Review the questions in Part C as a guide	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know  If Yes or don't know, continue to Part C. If No, the project is out of scope. Go to direct to 18a.					
Part C – Details of the research							

7	Give a brief reflection/overview of the ethics issues in this project.	None. No personal information will be asked or retained other than a self-assessment of experience in first-person shooter games that use keyboard and mouse controls. This will be used as a screening criterion for participants with no experience.
8	Who will the participants be? Identify specifically any vulnerable groups or individuals and address any special measures you intend to take to accommodate them	Student peers within the games academy at Falmouth University. The only stipulation is that the subjects will have some experience of playing multiplayer first person shooter games to encourage familiarity with player control methods.
9	How will participants be recruited and how many will be involved?	35 participants randomly selected from The Games Academy.
10	What will participants be asked to do?	Play the first-person shooter game artefact until completion. This will take approximately 10-15 minutes.
11	What potential risks to the interests of participants do you foresee and what steps will you take to minimise those risks? A participant's interests include their physical and psychological well-being, their commercial interests; and their rights of privacy and reputation	None. No inherent risks are presented. As samples are obtained within the Games Academy building belonging to Falmouth University, health and safety precautions are inherited from the faculty's established protocols.
12	Will you be obtaining personal information from any of the participants? E.g. name, personal opinions, address, recorded images or audio, date of birth, notes and observations.	<p>The participant will be asked to grade their experience of playing first-person shooter games that use keyboard and mouse controls. This will be used to discount outlying results as due to being unfamiliar with the control methods. The statistics from each session are recorded anonymously.</p> <p><b>If you answer 'Yes', please give details. In your response, please consider:</b> How will you store and use this information during the course of your research? What parts of this information will need to be confidential and how? Will you exhibit or publish the information? Will you retain information after the research is concluded? If information is to be destroyed, explain why this is appropriate.</p>
13	What potential risks to yourself or other members of the research team do you foresee and what steps will you take to minimise those risks? Eg. does your research raise issues of personal safety for you or others involved in the project, especially if taking place outside working hours or off University premises	None. No inherent risks are presented. As samples are obtained within the Games Academy building belonging to Falmouth University, health and safety precautions are inherited from the faculty's established protocols.
14	What potential risks to the environment do you foresee and what steps will you take to	<i>None</i>

	minimise those risks, eg. does your research involve plants or soil	
15	Will payments or in-kind contributions be made to participants?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO  <i>If YES, please state amount and whether payment is for out-of-pocket expenses, or a fee</i>
16	If the project is to receive financial support (real or in-kind) from outside the University, please give details, including any restrictions that have been imposed upon the conduct of the research. Please discuss this with RIO. Financial propriety, protection of commercial rights and reputation are important for you, the University and other third parties (eg. sponsors, participants etc.)	NA
17	Will any restrictions be placed on the publication of results?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO  <i>If YES, please state the nature of the restrictions, (eg. details of any confidentiality agreement)</i>
18a	Declaration of Principal Investigator if activity is out of scope	<p>I confirm that the form is accurate and complete to the best of my knowledge and belief and it does not fall under the scope of the Research Ethics Policy.</p> <p>Signature:</p> <p>Date:</p>
18b	Declaration of Principal Investigator if activity is in scope	<p>I confirm my responsibility to deliver the project in accordance with the University's Research Ethics Policy and Guidelines on Good Research Practice and, where externally funded, with the terms and conditions of the research funder. In signing this form I am also confirming that:</p> <p>a) The form is accurate and complete to the best of my knowledge and belief.</p> <p>b) There is no potential material interest that may, or may appear to, impair the independence and objectivity of researchers conducting this project.</p> <p>c) I undertake to conduct the project as set out in the application unless deviation is agreed by the University and to comply with any conditions.</p>

		<p>d) I agree to keep all ethics issues in the project under review and to re-submit a new application for ethics approval should any new issue arise or significant change occurs.</p> <p>e) I understand and accept that the ethical propriety of this project may be monitored by the University.</p> <p>f) I have included the following documents:</p> <p><input checked="" type="checkbox"/> An information sheet (compulsory)</p> <p><input checked="" type="checkbox"/> A consent form (compulsory)</p> <p><input checked="" type="checkbox"/> Copy of the full proposal/application (compulsory)</p> <p><input type="checkbox"/> Other relevant information</p> <p>Signature: </p> <p>Date: 28/11/2018</p>
19	Support from Director of Department	<p>I have reviewed the project with the applicant and confirm it either does not fall under the scope of the Research Ethics Policy or I support it.</p> <p>Full Name:</p> <p>Signature:</p> <p>Date:</p>
20	REC use only	