

UNIVERSITY OF ST ANDREWS

TEACHING AND RESEARCH ETHICS COMMITTEE (UTREC)

ETHICAL APPLICATION FORM

Please Tick: (click on the box then click 'Checked' for a cross to appear in the box)

Undergraduate ☒ Postgraduate Research ☐ Postgraduate Taught ☐ Staff ☐

Lecturer/Course Controller on behalf of Taught module ☐ Module Code: CS5199

Researchers Name(s):	Sizhe Yuen		
Project Title:	Player Prediction in DOTA		
School/Unit: (Please indicate)	Computer Science	Supervisor:	John Thomson
Emails	sy35@st-andrews.ac.uk	Date Submitted	1 October 2018

Project Description: Please give a concise description without technical terminology of **what** you are proposing to do; **Who** your participants are (eg. age, vulnerability, nationality, organisation); **Where** the research will take place (eg. site, country); **How** you are doing it, (eg. survey, interview). (90 words for database reasons)
This summary will be reviewed by UTREC and may be published as part of its reporting procedures.

This project aims to detect players in Dota 2 using accounts for illegitimate reasons such as account selling, by analysing replays of players and running the data through a machine learning model to find changes in behaviour. Publicly available data from Dota 2 players will be collected from the internet and processed. The research will be done in St Andrews and no interaction between the researcher and the players will take place.

Ethical Considerations: You should give an overview of the important ethical issues raised by your research including **how** you will obtain voluntary informed consent (especially where you are gathering audio/video data); **What** type of data you will be collecting (anonymous, coded, attributable); **How** you will handle, store and retain/destroy data. (90 words for database reasons) You should elaborate on these issues in Q28.
This summary will be reviewed by UTREC and may be published as part of its reporting procedures.

The replay data will be obtained from the official API of Valve Software. This replay data is publicly available as part of the game. The data contains identifiable account handles of the players on an opt-in basis. The account handles will be discarded as they are not needed. Account ids will only be used to collect data from the API and will be anonymised during the processing, analysis and storage of the data.

APPLICATIONS MUST BE SUBMITTED TO THE RELEVANT SCHOOL ETHICS COMMITTEE
[HTTPS://WWW.ST-ANDREWS.AC.UK/UTREC/SEC/SECMEMBERS/](https://www.st-andrews.ac.uk/utrec/sec/secmembers/) PLEASE DO NOT SUBMIT DIRECTLY TO UTREC.

- Please submit an electronic copy and one hard copy (with signatures) to the Secretary/Administrator. In the absence of a Secretary please submit to the SEC Convener.
- Applicants must be accompanied by the relevant supporting documents without which a full ethical assessment cannot be made.
- Please do not type out with the text boxes provided, note that the Text Boxes are fixed in size and will not allow any viewing beyond the word limit permitted.

If ethical approval has been obtained from the University of St Andrews for research so similar to this project that a new review process may not be required, please give details of the application and the date of its approval.

Approval Code:

Date Approved:

Project Title:

Researchers Name(s):

RESEARCH INFORMATION

1. Estimated Start Date: Week 3 of semester 1

2. Estimated Duration of Project: Semester 1

3. Is this research funded by any external sponsor or agency? YES ☐ NO ☒

If YES please give details:

For projects funded by ESRC please be aware of the Ethical and Legal Considerations found at [HTTP://WWW.ESDS.AC.UK/AANDP/CREATE/ETHICAL.ASP](http://WWW.ESDS.AC.UK/AANDP/CREATE/ETHICAL.ASP)

ESRC Funded Studentships (postgraduate Students) please be aware of the requirements as outlined at (in particular in relation to Submission of data to the Economic and Social Data Service, ESDS

4. Does this research entail collaboration with researchers from other institutions and/or across other University Schools/Units? YES ☐ NO ☒

If YES state names and institutions of collaborators:

5. If the research is collaborative has a framework been devised to ensure that all collaborators, including all University Staff, External Researchers, and Students, are given appropriate recognition in any outputs? N/A ☒ YES ☐ NO ☐

6. Where projects raise ethical considerations to do with roles in research, intellectual property, publication strategies/authorship, responsibilities to funders, research with policy or other implications etc., have you taken APPROPRIATE STEPS TO ADDRESS THESE ISSUES? N/A ☒ YES ☐ NO ☐

7. Location of Research
Fieldwork to be conducted: University of St Andrews

8. Are you using only library, internet sources or unpublished data (with appropriate licenses and permissions) and so have no human involvement such as interviewing of people? YES ☒ NO ☐

9. a. Who are the intended Participants (e.g. students aged 18-21) and how will you recruit them (e.g. advertisement)
- b. Estimated duration of Participant Involvement.

If you have answered YES to Q8 but the project has other Ethical Considerations please go to Q.28. If there are no other Ethical Considerations please sign and submit.

ETHICAL CHECKLIST

10. Have you obtained permission to access the site of research? N/A ☐ YES ☐ NO ☐
 If YES please state agency/authority etc. & provide documentation.
 If NO please indicate why in Q.28
11. Will inducement i.e. other than expenses, be offered to participants? YES ☐ NO ☐
 If YES, please give details of the inducement being offered and justify
12. Has ethical approval been sought and obtained from any external body e.g., REC(NHS)/LEA and or including other UK Universities? If YES, please attach a copy of the external application and approval. N/A ☐ YES ☐ NO ☐
13. Will you tell participants that their participation is voluntary? YES ☐ NO ☐
14. Will you describe the main project/experimental procedures to participants in advance so that they can make an informed decision about whether or not to participate? YES ☐ NO ☐
15. Will you tell participants that they may withdraw from the research at any time and for any reason, without having to give an explanation? YES ☐ NO ☐
16. Please answer either a. or b.
 a. Will you obtain written consent from participants? YES ☐ NO ☐
 b. (ONLY: Social Anthropology, Geography/Geoscience, International Relations & Biology)
 Will you obtain written consent from participants, in those cases where it is appropriate? YES ☐ NO ☐
17. Please answer either a. or b.
 a. If the research is photographed or videoed or taped or observational, will you ask participants for their consent to being Photographed, videoed, taped or observed? N/A ☐ YES ☐ NO ☐
 b. (Social Anthropology & Biology ONLY)
 Will participants be free to reject the use of intrusive research Methods such as audio-visual recorders and photography? N/A ☐ YES ☐ NO ☐
18. Please answer either a. or b.
 a. Will you tell participants that their data will be treated with full confidentiality and that if published, it will not be identifiable as theirs?
 b. Will you tell participants their work /contribution will be credited unless they specifically request anonymity? YES ☐ NO ☐
19. Will participants be clearly informed of how the data will be stored, who will have access to it. and when the data will be destroyed? YES ☐ NO ☐
20. Will you give participants a brief explanation in writing of the study? i.e. a debrief YES ☐ NO ☐
21. With questionnaires and/or interviews, will you give participants the option of omitting questions they do not want to answer? N/A ☐ YES ☐ NO ☐

If you have answered NO to any question 12- 21, please give a brief explanation in the statement of Ethical Considerations on Page 1 and expand in Q28 if necessary.
 If you have answered YES, it must be clearly illustrated in the relevant paperwork which must be attached i.e. Participants Information Sheet, Consent Form, Debriefing Form, Questionnaire, Letters etc.....

WORKING WITH CHILDREN AND OR VULNERABLE PEOPLE

Do participants fall into any of the following special groups?

- | | | |
|--|------------------------------|-----------------------------|
| 22. a. Children (under the age of 16 in Scotland or 18 in England/Wales) | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| b. Vulnerable Adult, receiving care or welfare services | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| c. People with learning or communicative difficulties | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| d. Residents/Carers in a specific location, e.g. Care Home | YES <input type="checkbox"/> | NO <input type="checkbox"/> |

NOTE TO SCHOOL ETHICS COMMITTEE. If the researcher has answered YES to Q22 this application, with all supporting documentation, **must** be forwarded to UTREC for review and approval. Exempt: Geography and Geoscience, Medicine and Psychology

NOTES TO RESEARCHER. If you answer YES to Q.22 a.–d., you may be required to obtain Protection of Vulnerable Groups [PVG] *Disclosure* approval. 'Working with Children and or Vulnerable People' guidelines and procedures can be found on our webpage <https://www.st-andrews.ac.uk/utrec/ethicalapplication/children/>

For those planning to conduct research in England / Northern Ireland please obtain the equivalent police check. Disclosure and Barring Service (DBS), previously known as CRB. <https://www.gov.uk/crb-criminal-records-bureau-check/overview>

- | | | |
|------------------------------|------------------------------|-----------------------------|
| e. NHS Patients or Staff | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| f. Institutionalised persons | YES <input type="checkbox"/> | NO <input type="checkbox"/> |

If you answer YES to Q 22.,e. or f., it is likely you will be required to obtain approval from the NHS. This **must** be sought prior to approval from the relevant SEC or UTREC.

- | | | |
|--|------------------------------|-----------------------------|
| g. People in custody | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| h. People engaged in illegal activities, e.g., drug-taking | YES <input type="checkbox"/> | NO <input type="checkbox"/> |

If YES to Q22. g. or h., you should ensure that the relevant Risk Assessment Checklist has been completed. <https://www.st-andrews.ac.uk/utrec/guidelines/riskassessment/>

If you have answered NO to Q22 a–d please skip Q23 and proceed to Q24.

- | | | |
|---|------------------------------|-----------------------------|
| 23. Have you lived/worked outside the UK in the last 12 months? | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
|---|------------------------------|-----------------------------|

If you have **lived outside the United Kingdom (UK) for a period of more than 6 months and answered YES to the Q22** you will be required to provide a police check from that country to cover that period. Further information and helpful links are available on our 'Working with Children and or Vulnerable People' webpage <https://www.st-andrews.ac.uk/utrec/ethicalapplication/children/>

ETHICAL RISK

This section is for ethical use only and does not replace the requirement to submit a Fieldwork Risk Assessment Form to the relevant Health and Safety/Risk Officer in your School. The University official procedures on Risk and Safety measures are linked from our webpage

[HTTPS://WWW.ST-ANDREWS.AC.UK/UTREC/GUIDELINES/RISKASSESSMENT/](https://www.st-andrews.ac.uk/utrec/guidelines/riskassessment/)

24. Are any of the participants in a dependant relationship with the investigator e.g. lecturer/student? If YES, give explanation in Q.28. YES ☐ NO ☐
25. Will your project involve deliberately misleading participants in any way? If YES, give details in Q.28 and state why it is necessary and explain how debriefing will occur YES ☐ NO ☐
26. Is there any significant risk to any paid or unpaid participant(s), field assistant(s), helper(s) or student(s), involved in the project, experiencing either physical or psychological distress or discomfort? If Yes, give details in Q.28 and state what you will do if they should experience any problems e.g. who to contact for help. YES ☐ NO ☐
27. Do you think the processes, including any results, of your research have the potential to cause any damage, harm or other problems for people in your study area? If YES, please explain in Q.28 and indicate how you will seek to obviate the effects. YES ☐ NO ☐

There is an obligation on the Lead Researcher & Supervisor to bring to the attention of the School Ethics Committee (SEC) any issues with ethical implications not clearly covered by the above

ETHICAL STATEMENT

28. Please provide a clear, concise statement of the ethical issues raised by this project and provide details of how you will address these issues, paying particular attention to those questions which have specifically asked for clarification in Q28. This section should also provide full details of what type of data you will be collecting (anonymous, coded, attributable) and how you will handle/store and retain/destroy data.

The replay data will be obtained from the official API Valve Software – the creators of the game – provide. This replay data is public and anyone can download a replay for a match with the corresponding match ID. Further, the API provides a list of all matches by a single player given their account id. A replay file of the game is created for every match that is played.

The data contains identifiable account handles and ids of the players on an opt-in basis. Players can choose to consent to third parties accessing their match history via an in-game option which is disabled by default. Players who do not consent appear as anonymous in the replay data. There is no link between the identifiable account names and real world names and ids. Due to the nature of having 10 different players in each game of Dota 2, it is not possible to obtain consent from the players directly.

The data gathered will only be presented in the project report and no personal data will be collected, stored or disseminated. We are not interested in account handle of players, and only interested in matching the behaviour of the player in order to detect illegitimate uses. The data will be anonymised by the removal of handle names and account ids will only be used in order to download the replays before being anonymised. Only the anonymised data will be stored and used for processing and analysis. The analysed data will be stored indefinitely.

DOCUMENTATION CHECKLIST

ETHICAL APPLICATION FORM	YES	<input checked="" type="checkbox"/>	NO	<input type="checkbox"/>
PARTICIPANT INFORMATION SHEET	YES	<input type="checkbox"/>	NO	<input checked="" type="checkbox"/>
CONSENT FORM	YES	<input type="checkbox"/>	NO	<input checked="" type="checkbox"/>
DEBRIEFING FORM	YES	<input type="checkbox"/>	NO	<input checked="" type="checkbox"/>
EXTERNAL PERMISSIONS	YES	<input type="checkbox"/>	NO	<input checked="" type="checkbox"/>
LETTERS TO PARENTS / CHILDREN / HEAD TEACHERS ETC.....	YES	<input type="checkbox"/>	NO	<input checked="" type="checkbox"/>
PVG Approval (Scotland) or Police Check (England/Other)	YES	<input type="checkbox"/>	NO	<input checked="" type="checkbox"/>
ADVERTISEMENT	YES	<input type="checkbox"/>	NO	<input checked="" type="checkbox"/>
Other (please list):				

DECLARATION

I am familiar with the UTREC Guidelines for Ethical Research <http://www.st-andrews.ac.uk/utrec/guidelines/> and *BPS, *ESRC, *MRC and *ASA (*please delete the guidelines not appropriate to your discipline) Guidelines for Research practices, and have discussed them with other researchers involved in the project.

STUDENTS ONLY

My Supervisor has seen and agreed all relevant paperwork linked to this project YES ☒ NO ☐

Print Name: Sizhe Yuen

Signature

Date:

SUPERVISOR(S)

The Supervisor must ensure they have read both the application and the guidelines, and also has approved the project and application, before signing below, with clear regard for the balance between risk and the value of the research to the School/Student. (Supervisors should provide this on a separate sheet or supply to the student to insert below) Please, if you wish, add comments in no more than 200 words:

Print Name:

Signature

Date:

STAFF RESEARCHER ONLY

YES ☐ NO ☐

Print Name:

Signature

Date:

SCHOOL ETHICS COMMITTEE OFFICIAL USE ONLY

STATEMENT OF ETHICAL APPROVAL

This project has been considered using agreed University Procedures and has been:

☐ Approved

☐ Not Approved pending:

☐ More Clarification Required

☐ New Submission Recommended

☐ Discussed with Supervisor

☐ Referred to UTREC

☐ Referred to Fieldwork Subcommittee

Convenor's
Name

Signature

Date:

Please use the space below and additional pages to attach any supporting documents i.e. Participant Information Sheets, Consent Forms, Debriefing Forms, Questionnaires, Letter to Parents etc.

*We recommend you refer to the sample documents provided at
<https://www.st-andrews.ac.uk/utrec/EthicalApplication/SampleDocuments/>*