

SAGE-HDR (v3.5 31/05/22)

Response ID	Completion date
904570-904552-99186934	2 Sep 2022, 12:07 (BST)

1	Applicant Name	Calum Palmer
1.a	University of Surrey email address	cp00628@surrey.ac.uk
1.b	Level of research	Postgraduate Taught (Masters)
1.b.i	Please enter your University of Surrey supervisor's name. If you have more than one supervisor, enter the details of the individual who will check this submission.	Dr Colin Fu
1.b.ii	Please enter your supervisor's University of Surrey email address. If you have more than one supervisor, enter the details of the supervisor who will check this submission.	c.fu@surrey.ac.uk
1.c	School or Department	Surrey Business School
1.d	Faculty	FASS - Faculty of Arts and Social Sciences

2	Project title	League of Legends Victory Prediction Analysis
3	Please enter a brief summary of your project and its methodology in 250 words. Please include information such as your research method/s, sample, where your research will be conducted and an overview of the aims and objectives of your research.	<p>This study aims to investigate the ability to accurately predict the outcome of an esports match of League of Legends through the use of the in-game statistics at various intervals throughout the match. Using this type of predictive analytics, teams could use these predictive systems to optimize and streamline their gameplay to improve their overall win rates and highlight key weaknesses in an opposing team's game plan. Various machine learning techniques will be used, models will be created and evaluated using certain performance metrics, such as Accuracy and AUC. The best machine learning technique will be used according to these metrics, with the preliminary models likely being completed using the Random Forest algorithm.</p> <p>Feature importance analysis will also be completed, highlighting key features that show that they play key roles in a game's outcome. The data will be Using Python, the data will be transformed, cleansed, and prepared before being split into smaller subsets based on the in-game timer, resulting in intervals of 10, 15, and 20 minutes. The objectives are to reach Accuracy and AUC values similar to some of its contemporaries found in previous literature, at roughly 60-70% accuracy depending on the in-game time. Another objective is to find the core features that decide the game at each interval of the game.</p>

4	<p>Are you planning to join on to an existing Standard Study Protocol (SSP)? SSPs are overarching pre-approved protocols that can be used by multiple researchers investigating a similar topic area using identical methodologies. Please note, SSPs are only being used by 2 schools currently and cannot be used by other schools. Using an SSP requires permission and sign-off from the SSP owner</p>	NO
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5	<p>Are you making an amendment to a project with a current University of Surrey favourable ethical opinion or approval in place?</p>	NO
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6	<p>Does your research involve any animals, animal data or animal derived tissue, including cell lines?</p>	NO
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8	Does your project involve human participants (including human data and/or any human tissue*)?	NO
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9	Will you be accessing any organisations, facilities or areas that may require prior permission? This includes organisations such as schools (Headteacher authorisation), care homes (manager permission), military facilities, closed online forums, private social media pages etc. This also includes using University mailing lists (admin permission). If you are unsure, please contact ethics@surrey.ac.uk .	NO
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10	<p>Does your project involve any type of human tissue research? This includes Human Tissue Authority (HTA) relevant, or non-relevant tissue (e.g. non-cellular such as plasma or serum), any genetic material, samples that have been previously collected, samples being collected directly from the donor or obtained from another researcher, organisation or commercial source.</p>	NO
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11	<p>Does your research involve exposure of participants to any hazardous materials e.g. chemicals, pathogens, biological agents or does it involve any activities or locations that may pose a risk of harm to the researcher or participant?</p>	NO
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12	Will you be importing or exporting any samples (including human, animal, plant or microbial/pathogen samples) to or from the UK?	NO
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13	Will any participant visits be taking place in the Clinical Research Building (CRB)? (involving clinical procedures; if only visiting the CRB to collect/drop-off equipment or to meet with the research team (i.e. for informed consent/discussion) select 'NO').	NO
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14	Will you be working with any collaborators or third parties to deliver any aspect of the research project?	NO
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15	Are you conducting a service evaluation or an audit? Or using data from a service evaluation or audit?	NO
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16	Does your funder, collaborator or other stakeholder require a mandatory ethics review to take place at the University of Surrey?	NO
17	Does your research involve accessing students' results or performance data? For example, accessing SITS data.	NO
18	Will ANY research activity take place outside of the UK?	NO
19	Are you undertaking security-sensitive research, as defined in the text below?	NO
20	Does your project require the processing of special category1 data?	NO
21	Have you selected YES to one or more of the above governance risk questions on this page (Q10-Q20)?	NO

22	<p>Does your project process personal data?</p> <p>Processing covers any activity performed with personal data, whether digitally or using other formats, and includes contacting, collecting, recording, organising, viewing, structuring, storing, adapting, transferring, altering, retrieving, consulting, marketing, using, disclosing, transmitting, communicating, disseminating, making available, aligning, analysing, combining, restricting, erasing, archiving, destroying.</p>	NO
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23	<p>Are you using a platform, system or server external to the University approved platforms (Outside of Microsoft Office programs, Sharepoint or OneDrive)?</p>	NO
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24	Does your research involve any of the above statements? If yes, your study may require external ethical review or regulatory approval	NO
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25	Does your research involve any of the above? If yes, your study may require external ethical review or regulatory approval	NO
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26	Does your project require ethics review from another institution? (For example: collaborative research with the NHS REC, the Ministry of Defence, the Ministry of Justice and/or other universities in the UK or abroad)	NO
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27	<p>Does your research involve any of the following individuals or higher-risk methodologies? Select all that apply or select 'not applicable' if no options apply to your research. Please note: the UEC reviewers may deem the nature of the research of certain high risk projects unsuitable to be undertaken by undergraduate students</p>	<p>NOT APPLICABLE - none of the above high-risk options apply to my research.</p>
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28	<p>Does your research involve any of the following individuals or medium-risk methodologies? Select all that apply or select 'not applicable' if no options apply to your research.</p>	<p>NOT APPLICABLE - none of the above medium-risk options apply to my research.</p>
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29	<p>Does your research involve any of the following individuals or lower-risk methodologies? Select all that apply or select 'not applicable' if no options apply to your research.</p>	<p>NOT APPLICABLE - none of the above lower-risk options apply to my research.</p>
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- I confirm that I have read the University's Code on Good Research Practice and ethics policy and all relevant professional and regulatory guidelines applicable to my research and that I will conduct my research in accordance with these.
- I confirm that I have provided accurate and complete information regarding my research project
- I understand that a false declaration or providing misleading information will be considered potential research misconduct resulting in a formal investigation and subsequent disciplinary proceedings liable for reporting to external bodies
- I understand that if my answers to this form have indicated that I must submit an ethics and governance application, that I will NOT commence my research until a Favourable Ethical Opinion is issued and governance checks are cleared. If I do so, this will be considered research misconduct and result in a formal investigation and subsequent disciplinary proceedings liable for reporting to external bodies.
- I understand that if I have selected 'YES' on any governance risk questions and/or have selected any options on the higher, medium or lower risk criteria then I MUST submit an ethics and governance application (EGA) for review before conducting any research. If I have NOT selected any governance risks or selected any of the higher, medium or lower ethical risk criteria, I understand I can proceed with my research without review and

		acknowledge that my SAGE answers and research project will be subject to audit and inspection by the RIGO team at a later date to check compliance.
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31	If I am conducting research as a student:	<ul style="list-style-type: none"> • I confirm that I have discussed my responses to the questions on this form with my supervisor to ensure they are correct. • I confirm that if I am handling any information that can identify people, such as names, email addresses or audio/video recordings and images, I will adhere to the security requirements set out in the relevant Data Protection Policy
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