

## Application for Research Ethics

### PART A

#### Section 1 – PROJECT AND APPLICANT DETAILS

**1.1 Project Title:** Book Recommendation System With Sentiment Analysis

#### 1.2 Applicant Details

<b>Name:</b> S.C Fernando	<b>University Email Address:</b> senesh.2018393@iit.ac.lk
<b>Contact Address:</b> 76 2/2 Jambugasmualla Rd, Nugegoda	<b>Telephone Number:</b> 076 475 2322
<b>Faculty:</b> Informatics Institute of Technology	

**Please check the relevant box:**

Undergraduate ☒      Postgraduate ☐      MPhil/PhD Student ☐      Staff ☐

<b>I confirm I have read the <i>University's Code of Practice Governing the Ethical Conduct of Research</i></b>	<b>YES</b> <input checked="" type="checkbox"/> <b>NO</b> <input type="checkbox"/>
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#### 1.3 Supervisor/Dean of Faculty/Faculty Research Director details

Please note that all applicants with a supervisor(s) must ensure that the supervisor signs the declaration at the bottom of this page if completing Part A only or in **Section 10.3** if completing Part B

All **staff** must ensure that their Dean of Faculty, or Faculty Research Director (or nominee), as appropriate, signs the declaration at the bottom of this page if completing Part A only or in **Section 10.3** if completing Part B

<b>Name:</b> Ms. Vayangi Ganepola	<b>University Email Address:</b> vayangi.2017564@iit.ac.lk
<b>Faculty:</b>	<b>Telephone Number:</b>

## PART A (Continued)

### Section 2 – Project Details

**2.1** Please provide a description of the background with references to relevant literature (250 words maximum):

In the age where the internet is the leading source of information recommendation systems are very common to be seen because of the abundance of data that is available. In this Research the author researches the currently available book recommendation systems and tries to find a improvement that can be done to significantly improve the performance of the system.

This document will discuss the identified problem, the significance of the research idea, the steps taken to approach the research, a review of existing work and the milestones and date of deliveries of the project.

**2.2.** Please provide a brief description and the aims of your study (250 words maximum):

*This Research aims to design, develop, test and evaluate a system that recommends books by taking the users past activity on social media using sentiment analysis to find the users mood and giving recommendations of books powered by a machine learning model.*

This research aims to design a system to recommend books to users with an up-to-date sentiment analysis model to find the users mood this information will be extracted from the users past social media activity. The recommendation system will be done using a machine learning recommendation algorithm which would recommend books from a premade library of books.

The Proof of concept for this research will be done by involving real users extracting their mood from their past activity and manually evaluating if the book recommendation they got is of their liking, this will help us evaluate if the system if performing up to expectations.

**2.3.** Please outline the design and methodology of your study (include details of the selection and recruitment of participants (if any) and details of any invasive (e.g. blood samples, inhalation/ingestion of food and/or non-food products (in abnormally higher or lower levels than normal or a different form), or intrusive (e.g. questionnaires, focus groups, interviews, etc.) procedures [attach extra information as necessary] (400 words maximum in total):

The one-person **Agile** SDLC model will be used in this project and OODA (object-oriented analysis and design) will be used as the design methodology.

Data gathering will be done by **online** questionnaires and surveys which will collect data with the consent and free-will of the participants.

**2.4.** Timescales

Start Date (DD/MM/YY): 20/09/2022

Estimated duration of work: 8 months

<b>Section 3 - RISK OF HARM</b>				
<p><b>NOTE 1:</b> Where indicated below applicants should check if the research will require ethical approval from a National Research Ethics Committee via the <b>Integrated Research Application System (IRAS)</b> - <a href="mailto:nres.queries@nhs.net">nres.queries@nhs.net</a> - <a href="http://www.hra-decisiontools.org.uk/ethics/">http://www.hra-decisiontools.org.uk/ethics/</a></p> <p><b>NOTE 2:</b> The University of Westminster holds a Human Tissue Authority Licence – This licence is specifically for tissue stored at 115 New Cavendish Street in accordance with the terms of the licence – Advice must be obtained from the University Human Tissue Designated Individual ( <a href="mailto:N.Presneau@westminster.ac.uk">N.Presneau@westminster.ac.uk</a> )</p>				
<b>RISK OF HARM (to self, colleagues, participants, environment or animals)</b>		<b>Yes</b>	<b>No</b>	<b>N/A</b>
1	Will any pain or more than mild discomfort result from the study?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	Could the study induce any psychological stress or anxiety or cause harm or negative consequences beyond the risks encountered in normal life?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3	Will the study involve prolonged or repetitive physical or psychological testing of human participants that may put someone at risk, e.g. use of treadmill?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4	Will the study involve raising sensitive topics (e.g. sexual activity, drug use, revelation of medical history, bereavement, illegal activities, etc.)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5	Does your work involve any "relevant material" containing human cells (e.g. blood, urine, saliva, body tissues but NOT established cell-lines) from living or deceased persons (Such work must take account of the Human Tissue Act)? – See Note 1 and 2 above.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6	Will DNA samples be taken from human participants (Such work must take account of the Human Tissue Act)? – See Note 1 and 2 above.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7	Does your study raise any issues of personal safety for you or other researchers or participants involved in the project (Especially relevant if taking place outside working hours or off University premises)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8	Does your study involve deliberately misleading the participants (e.g. deception, covert observation)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9	Does your work involve administration of a food or non-food substance of a different type from or in abnormally higher or lower amounts than normal or one that is known to cause allergic reaction(s) or potential psychological stress?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10	Does your study involve issues relating to personal and/or sensitive data?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>PARTICIPANTS (and/or their records/associated data)</b>		<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Does your work involve any of the following:</b>				
11	Human participants in a health and/or social care setting (e.g. patients, those attending day centres, community care, rehabilitation centres, etc., including in the NHS, other public, private and/or voluntary sectors)? – See Note 1 above.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12	Human participants who may be deemed vulnerable (e.g. children, people in poverty and/or with physiological or psychological impairments, persons attending rehabilitation centres, persons in easily identifiable positions that could be subject to victimisation, etc.)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13	Expectant or new mothers?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14	Refugees/Asylum seekers?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15	Minors (under the age of 18 years old)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16	Participants in custody (e.g. prisoners or arrestees)? – See Note 1 above.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17	Participants with impaired mental capacity (e.g. severe mental illness, brain damage, sectioned under Mental Health Act, lowered or reduced sense of consciousness)? – See Note 1 above.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
18	Animals (or animal tissue).	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>INFORMATION TO PARTICIPANTS</b>		<b>Yes</b>	<b>No</b>	<b>N/A</b>
19	Will you provide participants with a Participant Information Sheet prior to obtaining informed consent which can be taken away by the participant?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20	Will you describe the procedures to participants in advance, so that they are informed about what to expect?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21	Will you obtain informed consent for participation (normally written)? OR in the case of using personal data previously acquired was consent given for the reuse of the data for other research purposes?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22	Will you tell participants that they may withdraw from the research at any time and for any reason without any impact on their care, service provision etc.?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23	Will you give participants the option of omitting questions they do not want to answer?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24	Will you tell participants that their data will be treated as confidential and that, if published, it will not be identifiable as theirs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25	Will you offer feedback to participants at the end of their participation, upon request (e.g. give them a brief explanation of the study and its outcomes)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26	Has external funding or collaboration been applied for/received, which requires	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	institutional ethical consideration or approval?			
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### Useful links:

- <http://www.screc.org.uk/> - Social Care Research Ethics Committee
- <http://www.hra-decisiontools.org.uk/ethics/> - Human Research Authority decision tool to identify if research needs National Research Ethics Committee approval
- <http://www.nres.nhs.uk/applications/guidance/governance-and-directives/?entryid62=131341> – Governance Arrangements for Research Ethics Committees
- <http://www.nres.nhs.uk/EasySiteWeb/GatewayLink.aspx?allid=134016> - NRES algorithm “Does my project require review by a Research Ethics Committee”?
- <http://www.hta.gov.uk/policiesandcodesofpractice/codesofpractice.cfm> - Human Tissue Authority Code of Practice
- <http://www.hta.gov.uk> – Human Tissue Authority website
- [http://www.rsclearn.mrc.ac.uk/MRC\\_HumanTissueAct/player.html](http://www.rsclearn.mrc.ac.uk/MRC_HumanTissueAct/player.html) - Medical Research Council online training course for Human Tissue Act.

### What to do next:

- **If you have answered NO to questions 1-18 (inclusive) and YES to questions 19-25 (inclusive),** you do not need to complete the Full Research Ethics Approval Form (Part B). Please keep this form for your records, and do not submit to **Faculty Research Ethics Committee (FREC)** unless you require ethical consideration of your study, regardless of ethical implications, by an external body (question 26 has been answered YES). **A list of Faculty contacts is below.**
- **If you have answered YES to any of the questions 1-18 (inclusive) or NO to any of the questions 19-25** the Full Research Ethics Approval Form (Part B) **MUST** be submitted including Cover Sheet, Part A and Part B of the application form plus any required supplementary documents to the Secretary of the relevant Faculty Research Ethics Committee (FREC). **A list of Faculty contacts is below.**
- If you are applying for external Ethical Approval, please send a *copy* of the Conditions/Approvals letters to the **University Research Ethics Committee (UREC)** Secretary (this may include the original ethical application(s)). Where the external ethics committee/body has equal standing or primary jurisdiction, e.g. another University Research Ethics Committee or a National Research Ethics Committee, any approval will normally be received and noted by the University of Westminster Research Ethics Committee and further consideration may not be required. Where the external committee does not have equal or higher standing than the University Committee then the full ethical approval process at the university may still be required. Additional institutional compliance issues may need consideration by UREC.
- All Applications (dated, signed and authorised) and supplementary information or External Approvals should be sent to the University Research Ethics Committee (UREC) Secretary in *electronic format with a version number, document name and date and the Principal Investigator (or Undergraduate/Postgraduate Taught Student) name.* On receipt your application will be issued a unique reference number
- All new Applications should be submitted to a Research Ethics Committee (FREC or UREC) Secretary a minimum of 10 working days in advance of the Committee meeting date (earlier submission is recommended so that applications can be pre-vetted and obvious issues addressed before the application is considered by the Committee).

### Contact details:

<u>Faculty</u>	<u>Chair</u>	<u>Secretary</u>
<u>Architecture and the Built Environment</u>	<u>Professor Nick Bailey</u>	<u>Colette Davis</u>
<u>Media Arts and Design</u>	<u>Dr Anthony McNicholas</u>	<u>Fauzia Ahmad</u>

<u>Faculty</u>	<u>Chair</u>	<u>Secretary</u>
<u>Science and Technology</u>	<u>Dr John Colwell</u>	<u>Mandy Walton</u>
<u>Science and Technology Psychology Department Sub Committee</u>	<u>Dr Laura Boubert</u>	<u>TBC</u>
<u>Social Sciences and Humanity</u>	<u>Professor Marco Roscini</u>	<u>Victoria Grey- Edwards</u>
<u>Westminster Business School</u>	<u>Petar Sudar</u>	<u>Haydn Worley</u>
<u>University Research Ethics Committee</u>	<u>Professor Graham Megson</u>	<u>Huzma Kelly</u>

**For Use in Academic Year: 2015/16**

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