Softwarica
College of IT & E-commerce

Coventry University

Risk Risk Research Ethics Approval

Project Title

Application of Artificial Intelligence (AI) algorithm to improve online transaction security, detecting fraud to protect transactions and consumer trust.

Record of Approval

Principal Investigator

I request an ethics peer review and confirm that I have answered all relevant questions in this checklist honestly.	✕
I confirm that I will carry out the project in the ways described in this checklist. I will immediately suspend research and request new ethical approval if the project subsequently changes the information I have given in this checklist.	✕
I confirm that I, and all members of my research team (if any), have read and agreed to abide by the Code of Research Ethics issued by the relevant national learned society.	✕
I confirm that I, and all members of my research team (if any), have read and agreed to abide by the University's Research Ethics, Governance and Integrity Framework.	✕
I understand that I cannot begin my research until this ethics application has been approved.	✕

Name: Smriti Khadgi

Date:

Student's Supervisor (if applicable)

I have read this checklist and confirm that it covers all the ethical issues raised by this project fully and frankly.I also confirm that these issues have been discussed with the student and will continue to be reviewed in the course of supervision.

Name: Manoj Shrestha

Date:

Reviewer (if applicable)

Date of approval by anonymous reviewer: -

Risk Risk Research Ethics Approval

Project Information

Project Ref	161
Full Name	Smriti Khadgi
Faculty	Faculty of
Department	School of
Supervisor	Manoj Shrestha
Module Code	ST6000CEM
EFAAF Number	EFAAF
Project Title	Application of Artificial Intelligence (AI) algorithm to improve online transaction security, detecting fraud to protect transactions and consumer trust.
Date(s)	Date(s)
Created	Created

Project Summary

This project explores the application of Artificial Intelligence (AI) algorithms to enhance online transaction security by detecting and preventing fraud in real time. By leveraging machine learning to adapt to evolving fraud patterns, the solution aims to protect financial assets and restore consumer trust. The proposed system will offer a scalable and effective approach to mitigating fraud, benefiting both consumers and financial institutions.

Names of Co-Investigators and their organisational affiliation(place of study /employer)	None
Is this project externally funded?	No
Are you required to use a Professional Code of Ethical Practice appropriate to your discipline?	No
Have you read the Code?	No

Project Details

What are the aims and objectives of the project?	Application of Artificial Intelligence (AI) algorithm to improve online transaction security, detecting fraud to protect transactions and consumer trust. The objective are as follows: - Learn and understand various Artificial Intelligence (AI) algorithms and their applications in fraud detection. - Investigate how organizations apply Artificial Intelligence (AI) to enhance transaction security. - Identify and analyze alternative approaches and solutions for applying Artificial Intelligence (AI) in fraud detection. - Design and implement an Artificial Intelligence (AI)-based fraud detection system tailored to enhance online transaction security. - Compile and document findings, methodologies, and results. Prepare a detailed report on the project's outcomes and future recommendations. - Get feedback from supervisor and submit the report.
Explain your research design	It is a hybrid approach using both secondary and primary data.
Outline the principal methods you will use	Secondary Data: The combination of Published literatures like books and journals. Data from the organization including relevant statistics. Primary Data: Survey with stakeholders within Softwarica College and targeted interview with relevant managers.

Are you proposing to use a validated scale or published research method / tool?	No
Does your research seek to understand, identify, analyse and/or report on information on terrorism or from terrorist organisations, require access to terrorist groups or those convicted of terrorist offences or relate to terrorism policies in other international jurisdictions?	No
Does your research seek to understand, identify, analyse and/or report on information for other activities considered illegal in the UK and/or in the country you are researching in?	No
Are you dealing with Secondary Data? (e.g. sourcing info from websites, historical documents)	Yes
Is this data publicly available?	Yes
	No

Could an individual be identified from the data? e.g. identifiable datasets where the data has not been anonymised or there is risk of re-identifying an individual	
Are you dealing with Primary Data involving people? (e.g. interviews,questionnaires, observations)	Yes

Are you dealing with personal data?		Yes
Please specify what personal data you will be collecting.	Demographical data including age, gender, position and level of education.	
Are you dealing with sensitive data (special category data)?		No
Will the Personal or Sensitive data be shared with a third party?		No
Will the Personal or Sensitive data be shared outside of the European Economic Area(EEA)?		No
Is the project solely desk based? (e.g. involving no laboratory, workshop or offcampus work or other activities which pose significant risks to researchers or participants)		Yes
Will the data collection, recruitment materials or any other project documents be in any language other than English?		No
Are there any other ethical issues or risks of harm raised by the study that have notbeen covered by previous questions?		No

DBS (Disclosure & Barring Service) formerly CRB (Criminal Records Bureau)

Question	Yes	No
Does the study require DBS (Disclosure & Barring Service) checks?		✕
If YES, Please give details of the level of check, serial number, date obtained andexpiry date (if applicable)		
If NO, does the study involve direct contact by any member of the research team with children or young people under 18 years of age?		✕
If NO, does the study involve direct contact by any member of the research team with adults who have learning difficulties, brain injury, dementia,degenerative neurological disorders?	✕	✕
If NO, does the study involve direct contact by any member of the research team with adults who are frail or physically disabled?		✕
If NO, does the study involve direct contact by any member of the research team with adults who are living in residential care, social care, nursing homes, re - ablement centres, hospitals or hospices ?		✕
If NO, does the study involve direct contact by any member of the research team with adults who are in prison, remanded on bail or in custody?		✕
If you have answered YES to any of the questions above please explain the nature of that contact and what you will be doing		

External Ethics Review

Question	Yes	No
Will this study be submitted for ethical review to an external organisation ? (e.g.Another University, Social Care, National Health Service, Ministry of Defence, Police Service and Probation Office)		✕
If YES, name of external organisation		
Will this study be reviewed using the IRAS system?		✕
Has this study previously been reviewed by an external organisation?	✕	✕

Confidentiality, security and retention of research data

Question		Yes	No
What data are you collecting / using / recording?	Survey Data : Collected using University online survey which meets GDPR requirements. Interview: Notes will be taken from participants. All the information will be stored in my password protected laptop.		
Are there any reasons why you cannot guarantee the full security and confidentiality of any personal or confidential data collected for the study?			✕
Please provide an explanation	Data will be anonymized.		
Is there a significant possibility that any of your participants, and associated persons, could be directly or indirectly identified in the outputs or findings from this study?			✕
Please provide an explanation	Data will be anonymized.		
Is there a significant possibility that a specific organisation or agency or participants could have confidential information identified, as a result of the way you write up the results of the study?			✕
Please provide an explanation	This report will be used only within the university.		
Will any members of the research team retain any personal of confidential data at the end of the project, other than in fully anonymised form?			✕
Please provide an explanation	All the data will be destroyed after the completion of the project in 30th March 2024.		
Will you or any member of the team intend to make use of any confidential information, knowledge, trade secrets obtained for any other purpose than the research project ?			✕
Please give an explanation	Data will be anonymized and only be used within the university as it is only relevant to the university.		
Have you taken necessary precautions for secure data management, in accordance with data protection and CU Policy		✕	
Specify location (physical and electronic) where data will be stored	My personal password protected laptop.		
Will you be responsible for destroying the data after study completion?		✕	
If NO, who will be responsible for this?			
Please explain how any identifiable and anonymous data will be destroyed	Delete the contents from my laptop and destroy all the notes from the interview.		
Planned disposal date	30th March 2025		

Participant Information and Informed Consent

Question	Yes	No
Will all the participants be fully informed BEFORE the project begins why the study is being conducted and what their participation will involve ?	✕	
Please explain why		
Will every participant be asked to give written consent to participating in the study, before it begins ?	✕	
If NO, please explain how you will get consent from your participants.If not written consent, explain how you will record consent		
Will all participants be fully informed about what data will be collected, and what will be done with this data during and after the study ?	✕	
If NO, please specify		
Please explain what recordings (audio, visual or both) will be made and how you will gain consent for recording participants	I will not be making any recordings as the interviews will be noted. All participants will be required to give their consent for recording.	
Will all participants understand that they have the right not to take part at any time, and/or withdraw themselves and their data from the study if they wish?	✕	
If NO, please explain why		
Will every participant understand that there will be no reasons required or repercussions if they withdraw or remove their data from the study?	✕	
If NO, please explain why		
Does the study involve deceiving, or covert observation of, participants?		✕
Will you debrief them at the earliest possible opportunity?	✕	
If NO to debrief them, please explain why this is necessary		

Risk of harm, potential harm and disclosure of harm

Question	Yes	No
Is there any significant risk that the study may lead to physical harm to participants or researchers ?		×
If you have answered Yes, please explain how you will take steps to reduce or address those risks. If you have answered No, explain why you believe this is the case	Because the survey is conducted online and anonymously and interviewees will be interviewed online from my desk.	
Is there any risk that your study may lead or result in harm to the reputation of the University Group, its researchers or the organisations involved in the study?		×
If you have answered Yes, please explain how you will take steps to reduce or address those risks. If you have answered No, explain why you believe this is the case	Because the research is being conducted with the support of my supervisor and my employer and within the ethical guidelines of the university.	
Is there a risk that the study will lead to participants to disclose evidence of previous criminal offences, or their intention to commit criminal offences?		×
If you have answered Yes, please explain how you will take steps to reduce or address those risks. If you have answered No, explain why you believe this is the case	Because this is not a question relevant to the study.	
Is there a risk that the study will lead participants to disclose evidence that children or vulnerable adults are being harmed, or at risk or harm?		×
If you have answered Yes, please explain how you will take steps to reduce or address those risks. If you have answered No, explain why you believe this is the case	Because I am only dealing with their experience of studying at the college.	
Is there a risk that the study will lead participants to disclose evidence of serious risk of other types of harm ?		×
If you have answered Yes, please explain how you will take steps to reduce or address those risks. If you have answered No, explain why you believe this is the case	Because this question is not relevant to the study.	
Will participants be made aware of the circumstances in which disclosure has implications for confidentiality?		×

Payments to participants

Question	Yes	No
Do you intend to offer participants cash payments or any kind of inducements, or reward for taking part in your study ?		✕
If YES, please explain what kind of payment you will be offering(e.g.prize draw or store vouchers)		
Is there any possibility that such payments or inducements will cause participants to consent to risks that they might not otherwise find acceptable ?		✕
If YES, please explain)		
Is there any possibility that the prospect of payment or inducements will influence the data provided by participants in any way ?		✕
If YES, please explain)		
Will you inform participants that accepting payments or inducements does not affect their right to withdraw from the study at any time ?		✕

Capacity to give valid consent

Question	Yes	No
Do you propose to recruit any participants?	✕	
Do you propose to recruit any participants who are children or young people under 18 years of age?		✕
Do you propose to recruit any participants who are adults who have learning difficulties, mental health conditions, brain injury, advanced dementia, degenerative neurological disorders ?		✕
Do you propose to recruit any participants who are adults who are physically disabled and cannot provide written and/or verbal consent		✕
Do you propose to recruit any participants who are with adults who are living in residential care, social care, nursing homes, reablement centres, hospitals or hospices ?		✕
Do you propose to recruit any participants who are with adults who are in prison, remanded on bail or in custody?		✕
If you have answered YES to any of the questions above please explain overcome any challenges to gaining valid consent		
Do you propose to recruit any participants with possible communication difficulties, including difficulties arising from limited use of knowledge of the English language ?		✕
If YES, please explain how you will overcome any challenges to gaining valid consent		
Do you propose to recruit participants who may not be able to fully understand the nature of the study, the foreseen implications or cannot provide consent?		✕
If YES, please explain how you will overcome any challenges to gaining valid consent		

Recruiting Participants

Question		Yes	No
Who are the participants?	Students and Teachers of the Softwarica college.		
How are participants being recruited? Please provide details on all methods of recruitment you intend to use	Randomly selected peoples from Softwarica college.		
Do you foresee any conflict of interest?			✕
Please explain how will this conflict of interest be addressed			

Online and Internet Research

Question	Yes	No
Will any part of your project involve collecting data via the internet or social media?	✕	
If YES, please explain how you will obtain permission to collect data by these means	Survey will be conducted using Coventry University online survey. The URL will be circulated to participants.	
Will this require consent to access?		✕
If NO, please explain how you will get permission/ consent' to collect this information?		
Will you be collecting data using an online questionnaire/ survey tool? (e.g. BoS, Filemaker)?	✕	
If YES, please explain which software and how you are ensuring appropriate data security	Schoolworks online survey.	
Is there a possibility that the study will encourage children under 18 to access inappropriate websites, or correspond with people who pose risk of harm ?		✕
If YES, please explain further		
Will the study incur any other risks that arise specifically from the use of electronic media ?		✕
If YES, please explain further		

Information gathered from human participants

Question	Yes	No
Primary		
Does your project involve primary data collection from human participants via questionnaires, focus groups, interviews, psychological tests, photography/videography etc.?	✕	
If YES, Please detail the information to be collected and methods that will be used. Primary data collection will include Interviews and surveys. All the interviews will taken via online platform Microsoft teams which is the default system at Softwarica which will be recorded via teams well and destroyed on completion of the project. As an alternate direct phone calls will used for interviews in case Microsoft teams is not available. In such case the answers will be recorded in text and destroyed on project completion date 30th March 2025. Interviews are with students and employees of Softwarica College where I am a student. The Survey will be conducted via Coventry Online Survey and will be conducted among members of staff and students. All the survey will be destroyed on project completion date 30th March 2025.		
Is there the possibility of physical or psychological harm to the researcher(s) or the participants?		✕
If YES, please explain the possible harm and action taken to reduce/remove the risk		
Are any specific exclusions needed to prevent possible harm to participants (e.g. excluding people with known mental health problems)?		✕
If YES, please explain exclusions needed and how these will be carried out		
Are any of the questionnaires or other tests being used in the research diagnostic for specific clinical conditions?		✕
If YES, Please explain how you will take steps to reduce or address these risks		