



Ethical category of project
[Complete after approval]

Red	<input type="checkbox"/>
Amber	<input type="checkbox"/>
Green	<input checked="" type="checkbox"/>

Department of Computer and Information Sciences

STUDENT PROJECT: ETHICS REGISTRATION AND APPROVAL FORM

Section One: Registration

Title of project	Proactive threat detection of cyber-physical systems using Bayesian estimation: connected cars as a case study
Researcher's name	Adam Reviczky
Programme of study	MSc Cyber Security
Academic Year	2016/2017
Module code	LD0749
Supervisor's name	Dr Haider al-Khateeb
Second Marker's name	Ahmed Bouridane
Start Date of project	06 November 2016

Short description of project, including research methods and selection of any participants:

This project on the Internet of Things is looking at a novel way of predicting cyber threats on a specific use case of cyber-physical systems, by applying Bayesian estimation to compare the predicted behaviour of connected cars with real-time motion patterns for anomaly detection. Non-experimental research methods will be conducted with quantitative data analysis. No participants will be required for this research project.

Ethical considerations in the research project		YES	NO
1. Does your research involve an external organisation or partner e.g. NHS, School etc.		<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Does your research involve human participants?		<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. If yes to Q.2, will you inform the participants about the research?		<input type="checkbox"/>	<input type="checkbox"/>
4. Will you obtain their consent using the standard consent form?		<input type="checkbox"/>	<input type="checkbox"/>
5. Is any deception involved?		<input type="checkbox"/>	<input type="checkbox"/>
6. Do any participants constitute a 'vulnerable group' (see definition of Vulnerable People)		<input type="checkbox"/>	<input type="checkbox"/>
7. Will the research involve the following information? Commercially sensitive Personally sensitive Politically sensitive		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
8. Is the research likely to cause any significant environmental impacts?		<input type="checkbox"/>	<input checked="" type="checkbox"/>
9. Are there likely to be any risks for you or for the participants in your research?		<input type="checkbox"/>	<input checked="" type="checkbox"/>
10. If yes [to 5, 6, 7, 8 or 9 above] have you identified steps to address the issues?		<input type="checkbox"/>	<input type="checkbox"/>

Statement by researcher

This statement should explain how any issues identified in the answers to the above questions will be addressed and what steps will be taken to mitigate such risks or adverse impact

This research does not require any real user participation, neither does it involve external organisations nor does it have an impact on the environment. Any experiments will be conducted and analysed on generated data reflecting possible scenarios. The data being used has no sensitivity. No anonymisation of data is therefore required for the analysis and evaluation. Secondary sources will be provided through the university resources. In conclusion, no issues regarding the ethical and risk procedures needs to be addressed.

I have read the University and the Faculty Ethics Policy and Procedures and confirm that the answers I have given above are correct. Where issues arise under items 5, 6, 7, 8 or 9 [above] I have described in writing how I intend to approach these issues in the research.

Researcher's signature

.....*Raialey Khan*.....

Date

.....19 November 2016.....

Section Two: Approval

The form is reviewed by the supervisor and second marker. Approval maybe given by either for green projects; amber projects must be approved by the second marker. Red projects must be referred to the Faculty Research Ethics Committee.

Red: *Vulnerable participants, sensitive data, risks to participants or researchers, NHS, etc.*

Amber: *Human participants, environmental issues, commercially sensitive information, etc.*

Green: *No participants involved, no sensitive data, etc.*

For full definitions see section on Risk Categories in the Engineering and Environment Ethics Procedures.

Ethical approval

Green - Ethical approval is given without conditions	<input checked="" type="checkbox"/>
Amber - Ethical approval is given with the following conditions	<ul style="list-style-type: none">Information to be provided to all participants <input type="checkbox"/>Participant consent to be obtained using the standard Research Participant Consent Form or otherwise in accordance with Faculty procedures <input type="checkbox"/>Data to be stored and destroyed securely in accordance with University guidelines <input type="checkbox"/>Adherence to Data Protection Act (DPA) <input type="checkbox"/>Anonymity to be provided to participants <input type="checkbox"/>Commercial confidentiality to be provided to organisation(s) <input type="checkbox"/>Other (please state): <input type="checkbox"/>
Red - Project is referred to FREC for approval	<input type="checkbox"/>

Name of Approver	Dr Haider al-Khateeb
Signature	
Date	20 November 2016

Outcome of FREC referral – Decision, minute and date of meeting, or signatures of two signatories, one of whom is a member of FREC.