RESEARCH PROJECT: ETHICS REGISTRATION AND APPROVAL FORM

Section One: Registration *[To be completed by researcher]*

Title of research project/dissertation	Proactive threat detection of cyber-physical systems using Bayesian estimation: connected cars as a case study

Researcher's name	Adam Reviczky
Student number (if applicable)	14044980

Please only complete the following if researcher is a student:

Programme of study	MSc Cyber Security

Academic Year	2016/2017

Module code (if applicable)	LD0718

Principal Supervisor	Dr Haider Al-Khateeb

Start Date	01 August 2016

Brief outline of research topic:
Cyber-Physical Systems; Behavioural Profiling; Anomality Detection; Threat Definition; Threat Prevention; Bayesian Filtering; Intelligent transportation systems;

Short description of proposed research methods including identification of participants:
Non-experimental research will be conducted with quantitative data analysis methods. No participants will be required for this research.

Ethical considerations in the research project	YES	NO
1. Does your research involve an external organisation or partner?	☐	☒
2. Does your research involve human participants?	☐	☒
3. If yes to Q.2, will you inform the participants about the research?	☐	☐
4. Will you obtain their consent using the standard consent form?	☐	☐
5. Is any deception involved?	☐	☐
6. Do any participants constitute a 'vulnerable group'? (refer to definition of Vulnerable People)	☐	☐
7. Will the research involve the following information? Commercially sensitive Personally sensitive Politically sensitive Legally sensitive	☐ ☐ ☐ ☐	☒ ☒ ☒ ☒
8. Is the research likely to have any significant environmental impacts?	☐	☒
9. Are there likely to be any risks for the participants in your research?	☐	☐
10. Are there likely to be any risks for you in conducting the research?	☐	☒
11. If yes [to 5, 6, 7, 8, 9 or 10 above] have you identified steps to address the issues and mitigate any risks to participants, yourself or the environment?	☐	☐

Statement to explain how any issues identified above will be addressed and what steps will be taken to mitigate such risks or adverse impacts

There are no issues that needs to be addressed.

Ethical category of research project
Based on the above Ethical Considerations and with reference to the University's Ethical Scrutiny Risk Assessment tool identify the Ethical category of your research project (refer to **http://northumbria.ac.uk/static/5007/respdf/riskassesmenttool.pdf** for further guidance):

[Please tick as appropriate]

Red	☐	vulnerable participants; human tissue; sensitive data; risks to participants & researchers etc.
Amber	☐	human participants requiring informed consent; commercially sensitive information etc.
Green	☒	no participants involved; secondary data only; no sensitive data

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, 9 or 10 [above] I have described in writing how I intend to approach these issues in the research.

Researcher's signature ....

Date 01 August 2016
....

Section 1 Ethics Registration to be submitted to Principal Supervisor

Section Two: Approval

Supervisor / Module Tutor's name	Dr Haider Al-Khateeb

Ethical approval *[Please tick as appropriate]*

Green - Ethical approval is given without conditions	☒
Amber - Ethical approval is given with the following conditions: 15. Information to be provided to all participants 16. Participant consent to be obtained using the standard Research Participant Consent Form or otherwise in accordance with Faculty procedures 17. Data to be stored and destroyed securely in accordance with University guidelines 18. Adherence to DPA 19. Anonymity to be provided to participants 20. Commercial confidentiality to be provided to organisations(s) 21. Other (please state):	☐ ☐ ☐ ☐ ☐ ☐ ☐
Red - Project is referred to FREC for approval	☐

Name & role of approving member of staff 1:	…………………………
Signature	…………………………
Date	01 August 2016 …………………………

Outcome of FREC referral – Decision, minute and date of meeting; identify two signatories