# UoW Malaysia KDU Penang University College Research Ethics Registration and Approval Form

| Ethical category: | |
|---|---|
| Red | |
| Blue | |
| Green | / |

## Section One: Registration *[To be completed by student]*

| Title of research project/dissertation | Artificial intelligence based real time sign language to speech translation mobile application |
|---|---|

| Researcher's name | LAM E SHUEN |
|---|---|

| Programme of study | UCSE |
|---|---|

| Academic Year | YEAR 3 |
|---|---|

| Module code | CCP3012 |
|---|---|

| Supervisor's name | TAN PHIT HUAN |
|---|---|

| Second marker's name | DR. ANG SAU LOONG |
|---|---|

| Start Date of Project | 14/09/2020 |
|---|---|

**Brief outline of research topic:**

The aim of this research topic is to develop a software that translates hand gestures viewed by a smart phone's camera into correct translations of the English language and output it as speech.

**Short description of proposed research methods including identification of participants:**

The proposed research method is using Prototyping Model methodology which will create an incomplete version of the product, analyse it, review it, and then rinse and repeat creating another prototype until a complete product is created.

Participants included are the developer of the proposed product.

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| 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'? | ☐ | ☑ |
| 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 |
|---|
| |

**Ethical category of research project** *[Please tick as appropriate]*

| Red | ☐ | vulnerable participants; human tissue; sensitive data; risks to participants & researchers etc. |
|---|:---:|---|
| **Blue** | ☐ | human participants requiring informed consent; commercially sensitive information etc. |
| **Green** | ☑ | no participants involved; secondary data only; no sensitive data |

**I have read the University College 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: ___*LAM E SHUEN*_____

Date: ___*10/11/2020*_____

**Section 1 Ethics Registration to be submitted to Principal Supervisor or Module Tutor and allocated to a reviewer as follows:**

**Green risk - may be approved by Supervisor**

**Blue risk - to be submitted for approval by one independent reviewer (second marker)**

**Red risk - to be submitted for approval by two independent members of Research Committee**

## Section Two: Approval

| Supervisor/Module Tutor's name confirming ethical risk status | Tan Phit Huan |
|---|---|

**Ethical approval** *[Please tick as appropriate]*

| | |
|---|---|
| Green - Ethical approval is given without conditions (supervisor may approve). | ☑ |
| Blue – (to be approved by one independent reviewer) Ethical approval is given with the following conditions:<br><br>* Information to be provided to all participants.<br>* Participant consent to be obtained in accordance with the University College procedures.<br>* Data to be stored and destroyed securely in accordance with University College guidelines.<br>* Adherence to Data Protection Act.<br>* Anonymity to be offered to participants.<br>* Commercial confidentiality to be provided to organisations(s).<br>* Software vulnerabilities, exploits, hazardous software etc. not to be published without prior 'responsible disclosure' to the affected supplier.<br>* Other (please state): | ☐<br>☐<br>☐<br>☐<br>☐<br>☐<br>☐<br><br>☐ |
| Red - Project is referred to Research Committee for approval by two independent reviewers. | ☐ |

Name & role of reviewer 1: ___Tan Phit Huan_____

Signature: _____

Date: ___16 Nov 2020_____

Name & role of reviewer 2: _____

Signature: _____

Date: _____

**Outcome of Review:**