The following Expressions of Interest (EOI) is for a 3-month feasibility or development project conducted under the remit of the Applied Image Engineering (AIE) Group. The next AIE Standard Grant round deadline is 16th December 2019, with the successful project starting in October 2019. Please complete ALL sections of this form and e-mail it to [AIE@mmu.ac.uk](mailto:AIE@mmu.ac.uk). *Please read the guidance notes below before completing the form.*

**Guidance:**

*The AIE Group is specifically looking for projects that promote the development of innovative and novel image processing applications using (but not limited to) deep learning and artificial intelligence. The area of application is not limited and involves staff across the entire Faculty of Science and Engineering. If you would like to discuss details of scope, please contact:*

* *Dr Allen* [*T.Allen@mmu.ac.uk*](mailto:T.Allen@mmu.ac.uk) *- School of Engineering*
* *Dr Yap* [*M.Yap@mmu.ac.uk*](mailto:M.Yap@mmu.ac.uk) *- School of Computing, Mathematics and Digital Technology*
* *Dr Grant* [*Robyn.Grant@mmu.ac.uk*](mailto:Robyn.Grant@mmu.ac.uk) *– School of Science and the Environment*
* *Dr Johnson* [*C.I.Johnson@mmu.ac.uk*](mailto:C.I.Johnson@mmu.ac.uk) *- School of Engineering*

*This EOI is for Research Associate time funded by AIE although EOIs that include matched funding will be given priority. The lead applicant is expected to lead and manage the project, with an expected time commintment of at least 5% for the duration of the project. Matched funding is considered as a minimum of £3K for a 3-months full-time project and must include a letter of support indicating an external partner is willing to meet this cost including, where detailed, additional indirect costs such as specialised hardware and travel. Projects that can contribute in excess of this will be given additional consideration. Please discuss details of indirect costs that may be covered by this scheme with the members listed above.*

*SMEs in Greater Manchester can get up to £5k of match funding through innovation vouchers: https://www.businessgrowthhub.com/news/2018/11/5000-innovation-voucher-schemeIf the proposed project does not fit within a 3-month delivery plan, then alternative methods of delivery will be considered, e.g. 6-month 50%-part-time. Projects must fit within a 3/6/9/12-month window.*

*The AIP decision panel will be evaluating the proposal on their potential to contribute to research, income and impact, including papers, conference presentations and other outputs, as well as new revenue streams and partners. Applicants should outline how they will continue the work after the feasibility project i.e. funding applications, student projects, papers , conference presentations, etc. On submission of this form, we will evaluate the proposal. If the project is shortlisted applicants will be invited, to discuss details of the plan and the technical specifications. A decision on the success of the proposal will be made after the meeting.*

|  |  |
| --- | --- |
|  | Please confirm you have read the guidance above |
|  | Please tick if you have discussed the project with a member of AIE  Is so please indicate who: |
|  | Please confirm that a letter of support is included if you are applying with Matched Funding.  Please confirm that the project fits within your centres research strategy, and you will cc the centre head with the submission. (research project only) |

Signed…………………………………………..

[NAME]

Date:

## Project Details

|  |  |
| --- | --- |
| **Project name:** |  |
| **Date:** |  |
| **PI and Co-I(s) :** | (Including Faculty/Department) |
| **Proposed Duration:** | 3 months (if not complete section Project Plan Section P:5-6) |
| **Preferred Completion Date:** |  |
| Project Summary | *(Maximum 200 Words)* |
| Provide an overview of the project, highlighting the central concept and expected deliverable/s. | |

|  |  |
| --- | --- |
| Aims and objects | *(Maximum 200 Words)* |
| State the aim and objectives of the project. | |

|  |  |
| --- | --- |
| Justification | *(Maximum 300 Words)* |
| * Why is this project important to you and your work? * How will this be used in the future? * What is the expected research output, income and impact? | |

**Complete this section only if you have requested a variation to the proposed 3-month work package.**

|  |  |
| --- | --- |
| Brief Justification for Alternative Time (If the project is over three months e.g. 6 months part time) | *(200 Words)* |
|  | |

**Appendix**

This section is to gain in-depth, technical information on the project. If your project is shortlisted, during the meeting we will use this as a template for discussion. This form covers the equipment and tools currently available for the project, allowing the researchers to assess any limitations and potential issues before the project commences. Some of these sections may not be required for your project and can be skipped. If any sections are unclear, feel free to contact use to go through the form.

**Management:**

The project requires clear guidance to ensure your vision is fulfilled. Because of this are you willing to commit time to oversee the project and ensure the direction is maintained: Y / N

**Plan:**

Could you provide a brief outline of the steps required for the completion of your project?

**Datasets:**

For many of the required project machine and deep learning, systems are required, these require datasets for training the networks, this section analyse the availability of the data.

Does this project require data (yes if the system will need data for training): Y/N

If no skip to the next section.

Do you currently have any available data: Y/N

If no, please go to the next section. If data is required for, your project inquiries to the acquisition will be made.

Is the dataset annotated: Y / N / Not required

Annotation for our tasks mean we have the desired inputs and the desired outputs ready, for example if you wanted a system to detect an object in a image we would need sample of that object in a image with a separate file showing it’s location.

Are you able to bring an example of the data to an early meeting: Y / N

Could you describe the data available, including quantity:

**Software:**

This section checks if the project is to extend on existing software packages. Software packages should be available for the start of the project.

Does the project use/expand/compare on existing software packages: Y/N

If no, please go to the Hardware.

Is the software currently available: Y/N

Is the software open source or commercially based: \_\_\_\_\_\_\_\_\_\_\_

Open source software is freely available to use and download. Commercially available software requires purchasing for use, MMU has access to both opensource and commercial software on base machines, so checks should be performed. If you have any issues feel free to contact or speak to use about this.

Do you have experience with the software: Y/N

If yes are you willing to give a demonstration of the software use: Y/N

Could you give a brief description of the software, including supported operating systems:

**Software Open Source:**

Is the software hosted in online repositories, could you provide links: \_\_\_\_\_\_\_\_\_\_\_

What language/s does the software incorporate, if unsure leave blank: \_\_\_\_\_\_\_\_\_\_\_

Have you experience building/compiling the software: Y / N / Not Applicable

Building the software refers to have the source code, if it is a application you download and launch, such as a .exe choose Not applicable.

**Software Commercial:**

Do you have access to a software license for us to use: Y/N

**Hardware:**

This section checks if the project is to use specialised hardware or equipment. Hardware should be available for the start of the project.

Does the project require specialised hardware, e.g., not standard cameras, Jetson and sensors: Y/N

Does the hardware require unique API's: Y / N / Not applicable

API’s refer to how we communicate with the hardware, if the device is like a microscope where it take the images and you give the images to use this is Not applicable. If we have to communicate with the device, such as a balance board we’d need specialise API’s.

If yes have you used this before: Y/N

Do you have the equipment available currently: Y/N

Could you give a brief description of the equipment:

**Match funding:**

If match funding was indicated please fill this section, if not form is completed.

What is the amount of funding you have available for the project: \_\_\_\_\_\_\_\_

Who is the funding provider:\_\_\_\_\_\_\_

Are there any other benefits to the project, such as training and access to specialised equipment, conference/ journal paper fee waviers etc