**Final Year Project Proposal**

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**Suggested Supervisor**:

Faculty Member’s Name: Muhammad Amin Signature: \_\_\_\_\_\_\_\_\_

Date (17 September 2021)

**Project Details**

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| --- | --- | --- | --- |
| **Project Title** | ***Image and Video Caption Generation*** | | |
| **Project Area of Specialization** | Deep learning ,Computer Vision,Natural language processing | | |
| **Project Start Date** | 2021-9-17 | **Project End Date** | 2022-09-17 |
| **Project Summary (less than 2500 characters)** | Image Caption Generator automatically Generate the Caption of the content observed on the image in the form of a Natural language process. Image Caption Generator has very Applications for example enriching and created new image Datasets, human-reboot interaction, enhancing the power of google search engine and enhance the functionality of the system similar to google photos. | | |
| **Project Objectives (less than 2500 characters)** | 1)  2) | | |
| **Project Implementation Method (less than**  **2500 characters)** | **Deep Learning:**  CNN Model, LSTM  **Object/Detection:**  Computer Vision  **Language Transformation:**  NLP  **Rest API:**  Python, Flask/Django, Azure | | |
| **Benefits of the Project (less than 2500 characters)** | The application of Image Caption Generator has many applications like enhancing the power of google search engine, and helping impaired people,human-reboot interaction, enriching and created new images dataset, enhancing the functionality of system similar to google photos. | | |
| **Technical Details of Final Deliverable (less than 2500 characters)** |  | | |
| **Final Deliverable of the Project** | Developing an Web application Where user can upload their images and Our System will generate the image caption. | | |
| **Type of Industry** | Artificial intelligence , Data Science | | |
| **Technologies** | Python, OpenCV. TensorFlow, GitHub, Keras, Django ,VM,GPU | | |
| **Sustainable Development Goals** | Developing a system that will help the impaired people and blind people and also the power existing system like google search engine and enhance the human-reboot interaction. | | |

**Project Key Milestones**

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| --- | --- | --- |
| **Elapsed time in (days or weeks or month or quarter) since start of the project** | **Milestone** | **Deliverable** |
| Month 1 | 1st 6 Months | Model Trained on Datasets |
| Month 2 | 2nd 6 Months | Accurate model Deployed |

**Project Equipment Details**

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| --- | --- | --- | --- | --- |
| **Item Name** | **Type** | **No. of Units** | **Per Unit Cost (in Rs)** | **Total (in Rs)** |
| None | **0** | 0 | **0** | 0 |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | **Total in (Rs)** | **0** |