**Collaboration Agreement between UET CS Department and General Hospital**

**Project Title:**

IoT-Vision Enabled Assistance for Epileptic Patients.

**Supervisor Name:**

Dr. Usman Ghani (Chair Person of UET CS Department)

**Project Description:**

For epileptic patients, the project suggests an IoT-Vision system. to lessen seizure unpredictability, enhance quality of life, and lessen career load. During a seizure, real-time alerts and notifications will be sent, and patient data will be logged in a central database for machine learning analytics. The integrated system intends to enhance epilepsy management and will be assessed for efficiency and effects on the quality of life of patients and caregivers.

**Past Projects of CS Department:**

* **Funded Projects** (Provide some details)
* **Current Projects** (Mention Some projects)

**Purpose:**

The purpose of this collaboration is to establish a partnership between the UET Lahore Computer Science Department and the General Hospital to develop a video dataset that can be used for research and development of machine learning models and computer vision techniques in the nursing of epileptic patients.

**Scope:**

The collaboration will involve the collection, annotation, and sharing of video data obtained from epileptic patients and their daily activities with in hospital. The Computer Science Department will provide technical expertise in developing machine learning models and computer vision techniques while the Hospital will provide access to the patient’s room for video data recording and meetings with their caregivers.

**Responsibilities:**

The Computer Science Department will be responsible for:

1. Developing an efficient system for collecting and storing the video data.
2. Developing machine learning models and computer vision techniques to analyze and annotate the video data.
3. Collaborating with medical experts to ensure the accuracy and relevance of the annotations.
4. Sharing the annotated dataset with the Hospital for use in future research.
5. Share a complete Smart Monitoring System for epileptic patients with Hospital.

The Hospital will be responsible for:

1. Providing access to the epileptic patient’s room for video data collection of patients. ~~medical facilities and experts who can provide insights into the medical procedures and activities that will be recorded~~
2. Ensuring that all necessary ethical and legal considerations are met in the collection and sharing of the video data
3. ~~Collaborating with the Computer Science Department to ensure the accuracy and relevance of the annotations.~~
4. ~~Using the annotated dataset for research and development purposes within the Hospital~~

**Data Usage:**

The dataset will only be used for research and development purposes in the field of machine learning and computer vision. The data will be anonymized and all necessary ethical and legal considerations will be met in the collection and sharing of the video data.

**Intellectual Property:**

The intellectual property rights to the dataset will be jointly owned by the Computer Science Department and the General Hospital. Any publications or products resulting from the use of the dataset will acknowledge both parties.

**Confidentiality:**

All data and information obtained during the collaboration will be treated as confidential by both parties, and will not be disclosed to third parties without the prior written consent of both parties.

**Duration:**

This collaboration will begin on the date of signing and will continue for a period of one year. It may be extended by mutual agreement between the Computer Science Department and the Hospital.

**Termination:**

Either party may terminate this collaboration by providing written notice to the other party at least 30 days prior to the termination date. The termination of this collaboration will not affect any rights or obligations that have already accrued to either party.

**Standards for Collaboration:**

* WMA (Word Medical Association)
  + Declaration of Helsinki
* US Court v Brandt
  + The Nuremberg Code
* WMA (World Medical Association)
  + International Code for Medical Ethics
* Unknown
  + The European Union's General Data Protection Regulation (GDPR)
* IEEE Global Initiative on Ethics of Autonomous and Intelligent Systems.