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| Topics | Details |
| Title | Human activity recognition using pretrained 3D CNN model with transfer learning |
| Motivation |  |
| Description |  |
| Expected Outcomes (Milestones) |  |
| Technology Used |  |
| Timeline |  |
| Mode |  |

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| Activities Involved and Deliverables | 2021 | | 2022 | | | | | | |
| **Nov** | **Dec** | **Jan** | **Fab** | **Mar** | **Apr** | **May** | **June** | **July** |
| Activity 1:  1.Literature Survey with review of recent project related research paper  2.Selection of Human activity dataset  3.Selection of Pretrained 3D CNN models  Deliverables:  Efficient Model selection for Human Activity Recognition |  | A1 |  |  |  |  |  |  |  |
| Activity 2:  1.Training pretrained model for our dataset using Transfer learning  2.Trying to maximize the accuracy by increasing the layers in pretrained 3D CNN model  3.Generating the confusion metrics for comparison with other deep learning models in activity recognition  Deliverables:  Obtaining all parameters related to model accuracy |  |  | **A2** | |  |  |  |  |  |
| Activity 3:  1.Testing the model using test video dataset and obtaining accuracy graphs  2.Testing model for real time human activity recognition using opencv library  Deliverables:  Efficient Deep Learning Model for Human Activity Recognition is obtained |  |  |  |  | **A3** | | |  |  |
| Activity 4:  1.Implenting the model on real time hardware system using camera sensor and GPU  2.Testing this hardware on wheel robot to recognize the Human Activity and make the decision  Deliverables:  Testing our system for real time application as surveillance robot |  |  |  |  |  |  |  | **A4** | |
| Milestones Completion | Milestone 1 | | Milestone 2 | | Milestone 3 | | | Milestone 4 | |
| Academic Milestone Completion | Academic Milestone 1 Academic Milestone 2 | | | | | | | | |