# **LEARNING PLAN**

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#### **Problem Statement:**

Patients around the world suffer from decease which cause them to unable to move their body but their brain still functional.

### **Requirements:**

- The person must unable to move their body entire the experiment and training session
- Device using must be.....

#### **Scopes:**

- Using EEG device to collect brain signal from a person who cannot move.
- Focus on improving brain signal to control movement of the model
- Using Ros and non-invasive BCI In this article

## 15-week Learning Plan/Work Schedule:

| Week | Topics to Learn                             | Deliverables                       |  |  |  |
|------|---|------------------------------------|--|--|--|
| 0    | What I want to do                           | Learning Plan                      |  |  |  |
| 1    | What is BCI, Motor Imaginary, devices type  | Summary note and Research          |  |  |  |
| 2    | What is Bell, Motor imaginary, devices type | Summary note and research          |  |  |  |
| 3    | Create a Robotic hand CAD                   | 3D Hand Model + Summary note       |  |  |  |
| 4    | Collect EEG data and apply basic knowledge  |                                    |  |  |  |
| 5    | Feature Extraction from EEG Data            |                                    |  |  |  |
| 6    | Train Model and Fix Bug                     |                                    |  |  |  |
| 7    | Train Woder and Tix Bug                     | Code + Summary note                |  |  |  |
| 8    | Develop BCI node for ROS2 and Testing       |                                    |  |  |  |
| 9    | Develop Ber hode for RO32 and Testing       |                                    |  |  |  |
| 10   | Testing with Robotic Hand                   | Code and Video                     |  |  |  |
| 11   |   | Draft Report #1                    |  |  |  |
| 12   | Documentation + Run demo + Fix Bug          | Draft Report #2                    |  |  |  |
| 13   | Documentation - Run demo - 11x Dug          | Draft Report #3                    |  |  |  |
| 14   |   | Draft Report #4                    |  |  |  |
| 15   | Final Demo and Submission                   | Final Report, GitHub, Presentation |  |  |  |

| Student's | s Signature: |  |  |  |
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| Advisor'  | s Signature: |  |  |  |
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