**Study and Research Plans**

1. **Study Plan (5 months from 04-08/2023)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Activities** | **Month** | | | | |
| **04/2023** | **05/2023** | **06/2023** | **07/2023** | **082023** |
| Study SLAM video course [1] |  |  |  |  |  |
| Read “SLAM for Dummies” book [2] |  |  |  |  |  |
| Study Programming for Robotics course [3]  Read article and papers about SLAM |  |  |  |  |  |
| Study SLAM simulation tools  Implement and experiment SLAM algorithms |  |  |  |  |  |

**Resources**:

[1] SLAM Course, by University of Freiburg

http://ais.informatik.uni-freiburg.de/teaching/ws13/mapping/index\_en.php

[2] SLAM for Dummies, Søren Riisgaard and Morten Rufus Blas, MIT.

https://dspace.mit.edu/bitstream/handle/1721.1/119149/16-412j-spring-2005/contents/projects/1aslam\_blas\_repo.pdf

[3] Programming for Robotics, by ETH Zurich

https://rsl.ethz.ch/education-students/lectures/ros.html

1. **Research Plan**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Activities** | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** |
| * Study research methodologies * Study project requirements * Study the state of the art * Study algorithms and tools in lab * Contribute to lab’s projects |  |  |  |  |  |
| * Study applications of deep learning in SLAM * Find the 1st research idea * Implementation and evaluation * 1st manuscript preparation |  |  |  |  |  |
| * Continue explore research trend * Find the 2nd research idea * Implementation and evaluation * 2nd manuscript preparation |  |  |  |  |  |
| * Continue explore research trend * Find the 3rd research idea * Implementation and evaluation * 3rd manuscript preparation |  |  |  |  |  |
| * Find the 4th research idea * Implementation and evaluation * 4th manuscript preparation * Dissertation preparation |  |  |  |  |  |