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| Course Title | Exercise in Machine Learning | | |
| Department/Course | Graduate School of Marine Science and Technology Master's Course | | |
| Category/Specializations | <Graduate School Subjects>, <Other Courses' Subjects> | | |
| Year Offered | 1st | Class | 10 |
| Required or Elective | elective | Credit | 1 |
| Semester | Intensive Course | Course Type | |
| Day/Period | INTENSIVE | Lecture Room | Others |
| Chief Instructor | Okazaki Tadatsugi | | |
| Instructors | Okazaki Tadatsugi, | | |
| Theme & Objects | In order to understand the machine learning method well, the students implement the machine learning method on the automatic traveling robot and the ship robot and perform experiments. MATLAB is used as the development platform. | | |
| Learning Outcomes | By conducting exercises to implement machine learning methods on hardware, students aim to understand the effectiveness and problems of machine learning methods. | | |
| Styles of Class | combination: in-person classes/online classes (on-demand) Note: Combination includes hybrid-flexible classes or different styles (in-person class/online) for each class or both. | | |
| Course Contents | (1) Basic MATLAB exercise (2) Basic exercise of machine learning method (3) Experimental exercises using an automatic traveling robot (4) Experimental exercises using ship robots | | |
| Prerequisites | | | |
| Textbook / References | | | |
| Preparation & Review | Students should review using the MATLAB online content explained in the lecture. | | |
| Assessment and Examinations | The grade will be evaluated by averaging the score of all professors. | | |
| Evaluation Criteria | It is considered as the evaluation criteria of this course that you understand the principle and process of the analysis of each experiment (exercise). | | |
| Teaching activities & methods | | | |
| Instructor Contact Information | Please contact us in advance by e-mail and visit the teacher's room. (okazaki@kaiyodai.ac.jp) | | |
| Other Information | If there are many applicants, students of WISE program may be given priority. | | |
| URL | | | |
| Code | | | |
| Teaching Language | | | |
| Workload Calculation | (1)Teaching hours in class: 30hours (2)Contact hours (Laboratory time): (3)Preparation hours before classes: (4)Review hours after classes: 15hours (5)Preparation hours for presentation: (6)Preparation hours for Examination: (7)Supervised Study Hours (Meeting with the course instructor or TA): (8)Participation in related seminars: (9)Other activities: (10)Total Work Load: 45hours | | |
| Related Degree Awarding Policy | | | |
| Relation to SDGs | 9 Industry, innovation and infrastructure 14 Life below water | | |