Report – DD2414 – Fall 2020

DD2414 Engineering project in Robotics, Perception and Learning 15.0 credits

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Description of the course evaluation process
There was no formal course evaluation, but after the last course meeting we had a more general and high-level discussion about the course setup.

One challenge when evaluating the course is that the specific project and the way it is run influence the course very much. See course design.

Description of meetings with students
The two students taking the course met with two PhD students and one faculty (the course examiner in this case) once a week. While these meetings were about the specific project, they also served as a feedback channel about the course.

Course design
The course gives students with a special interest in robotics, perception and learning the opportunity to read an especially designed a project course in an area of their specific interest. Both course content and assessment are designed individually for each project. In principle the course can be initiated both bottom-up (i.e. by students) and top-down (i.e. by teachers). To take the course a teacher must be willing, capable and have time to supervise the project and take on the role as supervisor and teacher in the course and ensure that the student engage in learning activities that make them meet the objectives of the course and the specific project. When appropriate the teacher can delegate much of the day-to-day activities in the project to, for example, a PhD student or postdoc, but must remain the one responsible.

Before a new project starts, a specification must be approved by the course coordinator. The specification should contain intended learning outcomes that can be accessed for each student and a description of how the examination should be carried out for both those specific to this project and the general ones that have to be met for all projects.

The general objective of the course is to let students practice the skills required to participate professionally in project work in activities in robotics, perception and learning. The general learning outcomes are that a student that has passed the course shall be able to

- choose a course of approach and define, follow and follow up a plan for carrying out the task in a given resource budget and
- present orally and in writing, a description and defense of a technical solution to a problem in robotics, perception and learning.

The project work is divided into two parts with a half time evaluation between to allow individual follow up take place.

The students' workload

In this course round the course was taken by two 2nd year master students from the master's program Systems, Control and Robotics (TSCRM).

The students put a bit more time into the course than planned, but because we had regular meetings the plan could be adjusted to reduce the scope somewhat to counteract this.

The students' results

The students did a fantastic job in the course and met all objectives. The project was documented here https://alsarmie.github.io/DD2414-Documentation/.

Overall impression

Summarize the teachers' overall impressions of the course offering in relation to students' results and their evaluation of the course, as well as in relation to the changes implemented since last course offering.

The overall impression of the course was that it worked well this time.

Only two students have taken it so far so it is too early to tell much in general.

Analysis

Is it possible to identify stronger and weaker areas in the learning environment based on the information you have gathered during the evaluation and analysis process? What can the reason for these be?

The weak area of the learning environment is the same as its strength, namely the flexibility and close relation to the research environment. If one can establish a close link between the students and the research environment much is gained.

Prioritized course development

Nothing yet.