Teaching CV

Jorgen Larsen

Mærsk Mc-Kinney Møller Instituttet

SDU Embodied Systems for Robotics and Learning

Postaddresse:
Campusvej 55
5230
Odense M
Danmark
E-mail: jcla@mmmi.sdu.dk
Mobil: 28459215
Telefon: 65503547
Fax: 66157697

Teaching Philosophy:

In my experiences, teaching is a very diverse matter, because it is very individual from student to student how they learn. Some students comprehend the material fine by just reading the curriculum from the text book, others get a better understanding listening to a teacher and others needs to connect theory with practice – just to mention but a few.

My approach to teaching is to be able to explain the theory in ways different from what the students can read in their textbooks. The theory will naturally be the same, however, the same material can be taught in many different ways. Also, I find it very important to be able to put the theory into perspective, so that the students are able to see why the theory is important and how it connects to real world scenarios. This I believe, will dramatically increases the interest of the students because it makes it more clear to them why and how they are going to use the acquired knowledge. The last very important point is, to put knowledge into use. If the knowledge is only understood, but never used, it will quickly be forgotten again. However, if the students are using their newly acquired knowledge, they will remember it for a longer period of time. Also, their understanding of the subject will increase drastically. Therefore, I have mostly a few small assignments, a project or even both connected to my teaching in order to activate the students.

Generally I think teaching is fun, and I try as much as I can to let my joy and passion shine through to the students. It is to me very important to have a good connection with the students, both during teaching but also after class to make it easier for the students to stop by with questions. I believe it make the environment for learning better.

I normally have an "open office door" principle where students are always welcome to stop by if they have questions - however everything in moderation. I naturally also have hours where I prefer to be undisturbed and close my door.

A principle I also try to live by is, that everybody is not a genius and one can not expect everybody to live up to the same standards. However, if a student, good or bad, is really making an effort to come through and to learn the material or complete the project, I am willing to help that student a lot more, than the lazy genius. Like Tim Notke says: "Hard work beats talent when talent does not work hard". As long as the student work seriously and hard with a subject, you can not ask for more.

Teaching Practice

- Make lots of examples: As part of my teaching I try very hard to make examples that shows how the theory in the subject is use. In my view, it is very difficult to comprehend new material if it can not be put into use.

- Give projects to the students: It is one thing to learn about a subject sitting passively in class, it is something completely different to get your hands dirty while you do a small assignment or project within that subject. Therefore, every class somehow links to an assignment or project the students have to do.

- Feedback on assignments: An assignment without feedback is largely a waste of time because the student would then not know what was right and was what was wrong. Therefore I do my very best to give feedback on every assignment given.

- Let the creativity flow: Naturally, teaching in class needs some structure in regard to the projects the students do. However, I try my best to encourage the students to think outside the box. Every assignment often have more than one solution, and who am I to say that mine is the best. If the students can come up with a better solution that is just as solid in engineering terms, then I am happy and the student learn much more.

- Keep flexible: Every class is different, but the measure we compare to are the same for all classes. In order to get all students to the same level, teaching needs to be flexible. Some classes might need more time in some areas than others, and it is important to be able to adjust to that. Often that means that the teacher should do a continuous evaluation on the students progress in the course. If a large percentage of the class is falling behind, something needs to be adjusted.

- Open the world to the students: When teaching a course, often the teacher suggests reading material (a book) for that course. I do however, find it just as important to make the students aware that other materials might exist that they have to go find themselves. It is then also important to teach them how to evaluate/qualify a source of information.

- To me, the most important we can teach our engineering students is to be an engineer. The subjects are of second priority as long as the students can think like an engineer. That means, that they should be able to define a problem, come up with a number of possible solutions, select the best solution and then create/design/develop that solution. They should be able to study on their own and acquire new knowledge on their own. To be an engineer is mostly a matter of knowing the correct methods used in different situations and have the skills to apply them.

Supervising Philosophy

Supervising is to me somewhat different from teaching and supervising is again different from person to person and also if is a bachelor or a master student. Each scenario requires different attention.

Bachelor projects:

In the case of bachelor students I see my job as a supervisor as being a guide that points out a very clear direction for the project and also one that are very updated on the project status, to be able to catch it if the students somehow starts to lose grip on it. Meetings should be regularly and no more than two weeks between, however, I do require some form of weekly update.

Master projects:

Projects of this class should be carried out by students ready to be set free into the world, which is why they should also be able to carry out a master project largely on their own. By this I do not mean that they do not need to be supervised, but different from bachelor students, master students should be expected to know when to call for it - at least to a large degree. As standard, meetings are not as regular as for bachelors, but mostly every two weeks, unless the student asks for more or I judge that more attention is needed.

These are very general rules for my supervision of bachelor and master students and naturally, every project differ a bit. I mostly see my role as a supervisor as the guy that returns a question with a new question - one that hopefully makes the student find the answer by him or her self. During supervision, I prefer not to talk to much, since I would rather like to know what the student is thinking or doing in the project.

Teaching Experience:

2016	Teaching: "Embedded Systems" at 7. semester (MSc in Engineering (Electronics), SDU Odense)
2013-2015	Teaching: "Robot Electronics" at 7. semester (MSc in Engineering - Robot Systems (Advanced Robotics Technology/Drone Technology), SDU Odense)
2014-2015, 2017-pres.	Teaching: "Programming of Hardware and Robot Technology for Playing and Learning Purposes" at 5. semester (BSc in Engineering (Learning and Experience Technology), SDU Odense)
2014-2015	Teaching assistant in: "Adaptive embodied locomotion control systems", at 9. semester (MSc in Engineering - Robot Systems (Advanced Robotics Technology/Drone Technology), SDU Odense)
2015-pres.	Teaching: "Advanced Programmable Electronics" at 8. semester (MSc in Engineering - Robot Systems (Advanced Robotics Technology/Drone Technology), SDU Odense)
2012-2013	Teaching: "Introduction to Artificial Intelligence" at 7. semester (MSc in Engineering - Robot Systems (Advanced Robotics Technology/Drone Technology), SDU Odense)
2010, 2011	Teaching assistant in: "Introduction ot Artificial Intelligence" at 7. semester (MSc in Engineering - Robot Systems (Advanced Robotics Technology/Drone Technology), SDU Odense)
2011, 2013	Teaching assistant in: "Adaptive Robots", at 8. semester (MSc in Engineering - Robot Systems (Advanced Robotics Technology/Drone Technology), SDU Odense)
2006-2010	Teaching assistant in: "Introduction to Electronics, Part 1" at 1. semester (BSc in Engineering (Robot Systems), SDU Odense)
2007-2011	Teaching assistant in: "Introduction to Electronics, Part 2" at 2. semester (BSc in Engineering (Robot Systems), SDU Odense)
2008, 2009	Teacher at the "Robot Sommer Camp", By Robodays, Odense, Denmark.
2006-2011	Teacher in "LEGO-Lab" at Faculty of Engineering, SDU Odense

Supervision

I have been supervising or co-supervising the following number of projects in the given categories.
 - **Bachelors:** 11 - **Masters:** 10 - **Individual Study Activity:** 17 - **International guests:** 4

Formal Pedagogical Education

- "The 2014 Lecture Training Program at the University of Southern Denmark"

Courses

- "Engage your students with discussion forums, blogs and wikis", at SDU Odense (2014)

- "Curriculum design", at SDU Odense (2015)

- "Prezi - Need an alternative to Power Point?", at SDU Odense (2014)

- "Supervision, roles and relations", at SDU Odense (2015)

- "The Good Lecture - Practical introduction to new teachers", at SDU Odense (2011)

Other qualifications

- "Teaching in English at SDU", at level C1 in spoken English

Aktiviteter

Kunstig intelligens – farligt eller fantastisk?
Jørgen Christian Larsen (Foredragsholder)
27. okt. 2017

Kunstig intelligens – farligt eller fantastisk?
Jørgen Christian Larsen (Foredragsholder)
24. aug. 2017

Ny forskning af neurofysiologiske studier, kiropraktik samt udvikling af nyt materiale til katetre
Jørgen Christian Larsen (Foredragsholder)
4. maj 2017

TEDx Talk held at TEDx Odense, April 1. 2017
Jørgen Christian Larsen (Taler), Jacob Nielsen (Taler)
1. apr. 2017

Ny teknologi der ændrer vores verden: Avancerede robotter
Jørgen Christian Larsen (Foredragsholder)
29. apr. 2015

Århundredets Festival: Robotter og deres betydning for menneskets eksistens?
Jørgen Christian Larsen (Foredragsholder)
5. mar. 2015

Avancerede robotter – Fra LEGO til LocoKit
Jørgen Christian Larsen (Foredragsholder)
17. feb. 2015

Ny teknologi der ændrer vores verden: Avancerede robotter
Jørgen Christian Larsen (Foredragsholder)
11. feb. 2015

Darmstädter Heinerfest
Jørgen Christian Larsen (Taler)
6. jul. 2014 → 7. jul. 2014

Joined Seminar 3M
Jørgen Christian Larsen (Taler)
25. feb. 2013 → 28. feb. 2013

LocoKit: A Robotic Toolkit for Exploring the Importance of Morphology in Legged Locomotion
Jørgen Christian Larsen (Foredragsholder)
14. jun. 2012

The 5th International Symposium on Adaptive Motion of Animals and Machines
Jørgen Christian Larsen (Taler)
11. okt. 2011 → 14. nov. 2011

Brug af robotter: Optimeringsproblem
Jørgen Christian Larsen (Foredragsholder)
21. sep. 2011

IEEE International Conference on Robotics and Automation. ICRA'10
Jørgen Christian Larsen (Taler)
3. maj 2010 → 8. maj 2010

Robotfodbold og Kunstig Intelligens
Jørgen Christian Larsen (Foredragsholder)
21. sep. 2009 → 25. sep. 2009

Other Pedagogical Experience

Co-founder of Teknologiskolen in Odense. Teknologiskolen is a non-profit organization that offers technologically orientated afternoon activities and teaching for kids in the ages 5-18 years old. Teknologiskolen was founded in 2015. Currently we are teaching technology to 100+ kids every week that all have signed up to our program.