Undervisnings Portfolio

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Publikationer

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Corrections to "3D printed elastomeric lattices with embedded deformation sensing": 3D Printed Elastomeric Lattices with Embedded Deformation Sensing (IEEE Access (2020) 8 (41394-41402) DOI:10.1109/ACCESS.2020.2973664)
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Towards Printing mechatronics: An optimized battery-powered 3D-printed coupling design
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Towards Printing Mechatronics: Considerations for 3D-printed conductive coupling
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Ansættelse

Institut for Mekanik og Elektronik (IME)
SDU
1. jul. 2023 → 28. feb. 2025

Adjunkt
SDU Mechatronics (CIM)
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1. jul. 2023 → 28. feb. 2025

Teaching Experience

Teaching at University has started for me in 2016, when, as a Research Assistant, I was offered the chance to co-supervise a semester project for mechatronics students at SDU Sønderborg. This was followed by the DES course (Mechanical Design) and MAC (Machine Components), along with different projects at both bachelor and master level. As part of the PhD I have undertaken, I have participated in a few teaching courses which gave great insight into modern teaching methods. I have always gone to great lengths to integrate this knowledge into my teaching.
I emphasize non-behaviouristic teaching, orbiting around the cognitive approach. By planning lectures centered around students, I have quickly learned that the knowledge transfer is not unidirectional, but rather multifaceted. I view students as teaching assistants and actively include them in course content preparation.

Formal Pedagogical Training

Teaching at University has started for me in 2016, when, as a Research Assistant, I was offered the chance to co-supervise a semester project for mechatronics students at SDU Sønderborg. This was followed by the DES course (Mechanical Design) and MAC (Machine Components), along with different projects at both bachelor and master level.

Teaching Activities

Open Lab Nights and Company visits outside regular courses

Teaching Vision

My vision falls under the cognitive approach towards education. I find myself an enabler for students and not a knowledge bank, seeking to move the information acquisition more among students than between them and myself. To this end, I have struggled to create extensive rapid manufacturing facilities where students are allowed to experiment with their own designs in a hands-on learning-by-doing approach.
In a class of 100 students, I believe there always are to be found 20 teaching assistants and 20 research assistants. Practicing research-based teaching and tilting the didactic triangle towards the student, one quickly observes the great ambassadors of spreading knowledge they are. Lately I have been experimenting with student-generated course content, where I guide and curate the information about to be presented in class, with emphasis on online activities to facilitate active learning.

Development goals

I want to obtain as broad a perspective on the different roles a teacher can successfully take in the learning process. At the moment, I feel confident moderating student learning and their discussions, as well as curating information, activities and homework they might generate for their peers.
The next step is varying the magnitude of my roles, coupled with different levels of autonomy given to students in collaborative learning and their peer instruction. My belief is that there are several “sweet spots” where this type of learning can thrive, fostering course alignment.