Teaching portfolio

1. Teaching CV: A list of teaching and supervision tasks, including specification of academic fields, scope, level (bachelor, master, continuing education, PhD). Please state the teaching method used (e.g. lecture, class teaching, exercises, supervision, examination, coexamination, distance teaching, internet-based teaching and evaluation of teaching). Please also indicate the language of instruction.

Courses
Lecturer: "High Performance Programming"
4th semester (COMTEK4), Department of Electronic Systems, AAU, Denmark, Feb. – May 2021. Online.

Teaching assistant: "Wireless communication systems and networks"
 1st semester of the MSc in Communication Technology (CT7), Department of Electronic Systems, AAU, Denmark, Sept. – Nov. 2020.

Lecturer: Ph.D. course on Wireless Communications for 5G and Beyond
Department of Electronic Systems, AAU, Denmark, Nov. 23–25 2020. Mixed online and face-to-face event.
Lectures: "Access networking in 5G" and "Advanced access networking algorithms and protocols."

Lecturer: Ph.D. course on Wireless Communications for the Internet of Things (IoT)
Department of Electronic Systems, AAU, Denmark, May 13–16 2019.
Lectures: "3GPP random access protocols for IoT," "3GPP access control mechanisms for massive IoT applications," and "Areas of opportunity for multi-connectivity."

Invited speaker in training events
"Random access in 5G New Radio" and "Access control and scheduling in 5G New Radio," INCOMING Ph.D. School on Massive IoT, Distributed and Decentralized Information Processing, Nov. 2020. Online.

"Wireless Access for URLLC," WindMill MSCA ITN Stockholm Ph.D. Training School, Oct. 2020. Online.

"5G: a glimpse to the future," Universidad Autónoma del Estado de México (UAEM), Estado de México, México, Sept. 2018. Language: Spanish

"Creating high-quality graphics for scientific papers with L A TEX," Universidad Autónoma del Estado de México (UAEM), Estado de México, México, Sept. 2017 and 2018. Language: Spanish

Supervision of Master theses and projects
"Optimizing reliability and energy efficiency in smart metering applications," Jonas Witting Rabjerg, MATTEK10, AAU, Jan. – June 2021 (submission deadline).

"SDR the last frontier," Andreas Casparsen, Panagiotis Antoniou, and Jonas Ingerslev Christensen, CT10, AAU, Sept. 2020 – June 2021 (submission deadline). Long project.

"Framework for Systematic Certification of IoT Devices," Nicolaj Kjettrup and Maxime Jérome Remy, CT10, AAU, Denmark, May 2019.

"M2M communications in high-speed trains: Adaptive methods applied to the LTE-A random access channel," Ericka Oyague, Department of Communications, UPV, Valencia, Spain, Sept. 2018. Language: Spanish

"Efficient machine-to-machine communications in LTE-A, case study: high speed trains," Gabriela Moyano, Department of Communications, UPV, Valencia, Spain, Sept. 2017. Language: Spanish

Supervision of student projects (bachelor)
"Modeling and classification in smart metering applications," Jonas Witting Rabjerg, 9th semester (MATTEK9), AAU, Fall 2020.

"Frame synchronization with machine learning," Benjamin B. Christiansen, 9th semester (CT9), AAU, Fall 2020.

"Tree-splitting algorithms with machine learning for efficient random access," (tentative title), Jacob Mørk, Jakob Olavi Grangaard Olesen, Martin Møller Sørensen, and Magnus Jónhardsson, 6th semester (MATTEK6), AAU, Spring 2021.

"Maximum information flow analysis of multiple radio access technology wireless mesh networks," Jonas W. Rabjerg, and Kristian J. Tilsted, Bachelor project, 6th semester (MATTEK6), AAU, Spring 2019.

"Adaptive modulation and coding for inter-satellite links," Magnus Melgaard, Adham Taha, Jan Peter Mortensen Christiansen, and Christian Villekjær Østerballe, 6th semester (CT6), AAU, Spring 2021.

"The complications of wireless data transmission in an autonomous environment," Kazim Kerem Kocan, Martin Skøtte Knudsen, and Laurits Winter, 3rd semester (COMTEK3), AAU, Fall 2020.

"Optimization of food delivery couriers," (tentative title), Kasper Kaputu Henningsen, Nikolaj Dam, Anders Mariegaard, Mikkel Raakjær Stidsen, Sarmilan Tharmabalan, Simon Peter Rasmussen, and Nicolai Hejlesen Jørgensen, 2nd semester (SW2), AAU, Spring 2021.

2. Study/programme administration and management: Experience in programme management and coordination. A list of study administration tasks, e.g. study board membership, chair of study board, semester or course coordinator, accreditation tasks, etc. Experience in planning teaching activities. Experience in programme development. Participating in committees and commissions etc. on education issues.

3. Formal pedagogical training: A list of completed courses in university pedagogy, PBL courses, workshops, academic development projects, collegial guidance and supervision, etc. Written assessment from the course in university pedagogy for assistant professors. Participation in conferences on pedagogy and didactics. Please enclose any documentation of the above, such as course certificates, references, etc

Course participant "Basic course with focus on PBL, AAU model," Apr. 2019.

4. Other qualifications: Conference contributions and attendance, contributions to debates, scientific articles on pedagogical issues etc. Peer supervision, editorials, mentoring experience or other types of competence development activities.

Type your answer here...

5. Pedagogical development and research: Development of new courses, teaching materials, teaching methods, examination types or other types of pedagogical development. Didactic and pedagogical research. Cooperation with external collaboration partners.

Type your answer here...

6. References on your teaching skills from superiors or colleagues. Teaching evaluations and any teaching awards received.

Type your answer here...

7. Personal reflections and initiatives: Here you may state any personal deliberations as regards teaching and supervision, any wishes and plans for further pedagogical development, plans for following up on student feedback/evaluations, etc. Personal reflections on your own pedagogical practice, including objectives, methods and implementation. This should include an analysis and a reasoned description of your pedagogical activities in relation to your pedagogical understanding and student learning. Thoughts on the teaching method at Aalborg University (which is largely based on group-organised project work and problem-based learning)

Type your answer here...

8. Any other information or comments.

Type your answer here...