Teaching portfolio

1. Teaching CV: A list of any lecturing and supervision tasks, including specification of academic fields, scope, level (bachelor, master, continuing education, PhD) as well as any external examiner tasks.

Abbreviations
- MIKE (EN): Master program in Innovation, Knowledge, and Entrepreneurial/Economic dynamics (MIKE), discontinued with last cohort in Fall 2018
- HA (DK): Erhvervsøkonomi (HA) - (engl. Economics and Business Administration), Bachelor
- Oecon (DK): Økonomi - (engl. Economics), Bachelor / Master
- EBA (EN): Economics and Business Administration, Bachelor
- SDC: Sino-Danish Center for Education and Research
- SDS: Social Data Science (9th semester specialization. http://sds.aau.dk)
- BDS: Business Data Science (cand.merc.)

Courses

PhD and Academic Workshops
- May 2017, (PhD School, 12th Globelics Academy, Tampere, Finland), Data mining, analysis and visualisation –strategies for overcoming the lack of abundant and reliable data sources
- January 2018, (PhD School, DRUID Academy, Odense, DK), Intro to Natural Language Processing for Innovation
- Research – Half-day-course
- April 2018, (AOM Big Data Conference, Surrey, UK), Natural Language Processing 101. Workshop
- June 2018, (DRUID Conference, Copenhagen, DK), Exploring Potentials of Machine Learning and Artificial Intelligencefrom an Industry & Innovation Perspective, PDW
- September 2018, (PhD School, Africalics Academy, Morocco), 3 day Methods and Analytics Workshop
- August 2019 (CICALICS PhD Course), Introduction to Machine Learning
- August 2019 (PhD School, 14th Globelics Academy, Tampere, Finland), Introduction to Machine Learning and Natural Language Processing for Innovation Studies
- November 2019 (PhD Course, Social Data Science, Aalborg, DK), Course organizer and main facilitator
- From June 2020: PhD supervisor, Eskil Olav Andersen
- PhD co-supervisor, Ivan Nechaev (With Daniel Hain)
- PhD co-supervisor, Regina Brogna (With Lorenzo Massa)
- November 2020 (PhD Course, Social Data Science, Aalborg, DK), Course organizer and main facilitator
- November 2021 (PhD Course, Social Data Science, Aalborg, DK), Course organizer and main facilitator
- Since February 2022 (Economics and Management of AI PhD Network), Senior Member of the network
- August 2022, (PhD School, 15th Globelics Academy, Tampere, Finland)

Graduate
- 2013-2015, MIKE (master, 1st. sem.), Scientific Work and Project Writing, A 2-day interactive workshop organised together with colleagues in the research group particularly to support new/international students at AAU that are new to PBL and project work in groups.
- 2016, MIKE (Master, 1st. sem.), Innovation management and industrial dynamics in a global context
- from Autumn 2017-2018, Research Methods, MIKE-B (master, 1st. sem.), Module coordinator.
- from 2017-2021, Innovation Management, (Master 2nd sem., SDC, Beijing, China), Innovation Systems and Government-Business Relations
- from Autumn 2018, SDS (Social Data Science Semester), Open to various programmes from SAMF and HUM, (Master,3rd. sem.), Semester Coordinator (together with Daniel S. Hain), main lecturer and project supervisor.
- from Autumn 2022, BDS (Business Data Science), coordinator and main lecturer on the new cand.merc. Lecturing at modules:
  - Introduction to Data Handling, Exploration & Applied Machine Learning
  - Natural Language Processing and Network Analysis
  - Applied Deep Learning and Artificial Intelligence
  - Data Engineering and Machine Learning Operations in Business

Undergraduate (and other)
- Since 2014-2019, HA, EBA bachelor, MIKE, (Bachelor: 2nd,3rd sem, Master: 1st sem.), Introduction to Data Science, Single lectures and workshops as part of different courses related to statistics and quantitative methods
- Autumn 2017 and 2018, Empirical Project lecturer/supervisor, Oecon. (BA, 5th. sem.).
- from Autumn 2018, Descriptive Statistics (Beskrivende Statistik), HA. (Bachelor, 1st. sem.), Course coordinator.
- From Autumn 2019, Finding and handling literature (Literatursøgning & Kildehåndtering), HA. (Bachelor, 1st. sem.).
- 2020 - 2022 HA (New curriculum): Developed curriculum and executed 3 quantitative modules on the 1-3 semesters.
  - Beskrivende Statistik
  - Anvendt Matematik
  - Kvantitative Metoder

Supervision
- HA, Semester: 2, 6, Mini projects in macroeconomics and bachelor thesis supervision (also EBA until F2020)

•Oecon., Semester: 3, Semester projects, Bachelor and Master Thesis supervision
•MIKE (Master, English), all semesters, Frequent supervision of semester projects, internship projects, and master thesis supervision
•Social Sciences Joint Semester (Danish, Bachelor, 2016-change of curriculum), 1st Semester, Supervision of one cluster (4groups)throughout the semester (P1, P2 projects, thematic cluster workshops, status seminars)
•Social Data Science projects
•Business Data Science
Other teaching-related activities
•Internal censor: All the above-mentioned programmes and courses

2. Study administration: A list of any study administration tasks, e.g. study board membership, head of studies or semester or course coordinator, accreditation, etc.

•2017-2021: Innovation Systems and Government-Business Relations, coordination of the module together at the SDCprogramme, Beijing.
•2017-2018, Research Methods, MIKE-B (master, 1st. sem.), Module coordinator
•from Autumn 2018, Descriptive Statistics (Beskrivende Statistik), HA. (Bachelor, 1st. sem.), Course coordinator
•from Autumn 2018, SDS (Social Data Science Semester, Master,3rd. sem.), Semester Coordinator (together with Daniel S. Hain)
•2019 HA revision: Member of the group that has been responsible for the complete revision of the largest program at the department. Responsible for the redesign of the quantitative methods training
•2020-2022: Module responsible Descriptive Statistics, Mathematics and Quantitative Research Methods (new HA)
•From 2022: Program coordinator for cand.merc. Business Data Science

3. University pedagogy qualifications: A list of any completed courses in university pedagogy, PBL courses, workshops, academic development projects, collegial guidance and supervision, etc.

• Basic university pedagogy for Ph.D. students
• Pedagogical Teaching Course for Assistant Professors (Adjunktpædagogikum, AP) 2016 cohort

4. Other qualifications: Conference attendance, editorials, presentations, etc. relating to education, 'University Teaching Day', etc.

Conference organisation
Member of the organising committees of the Globelics conferences (~350 participants) in 2014 (Addis Ababa, ET), 2015 (Havanna, CU), and 2016 (Bandung, ID) www.globelics.org responsible for the coordination of the reviewing process and scientific programming

5. Teaching activity development and teaching materials: A list of any contributions to the development of new modules, teaching materials, study programmes, e-learning, collaboration with external business partners, etc.

Currently, my primary focus lies on the development and first-time execution of the Social Data Science Semester. Read more about SDS here: http://sds.aau.dk

6. Teaching awards you may have received or been nominated for.

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 pedagogic development, plans for following up on feedback/evaluations from students, etc.

Motivated by the Pedagogical Teaching Course for Assistant Professors (Adjunktpædagogikum, AP), which is aimed at stimulating and developing my set of teaching skills, as well as the self-reflection and development of my pedagogical approach and competences, I am currently experimenting with different teaching techniques. Particularly, I have observed that Problem Based Learning (PBL) as it is practised at Aalborg University is challenged by the abundance of information and options. While I think that students (especially at the master / cand. level) should have the freedom of choice when it comes to finding and working on a problem, the challenge lies often in a lack of focus, and confusion, particularly with regard to a detailed understanding of existing research and theoretical frameworks. This leads many times to mismatches between empirical problems and frameworks. Based on these observations, the teaching techniques that I currently try out are encouraging the students to work more focused with the course literature, training their ability to understand academic discourses and the context out of which specific frameworks emerge. For instance, I use reaction papers and question

sets combined with online peer evaluation to stimulate individual student's engagement with the literature and in the same time discussion and interaction. I am happy that, in part of my promotion, the university is about to clear final formalities in the licensing process of peergrade.io, the solution that I have been using. Another issue that I find increasingly problematic in the programmes that I teach and broader social science education, is the lack of applied methodological training. Against the backdrop of the emerging Big Data Society, this seems more than anachronistic. In my opinion, this also contradicts the PBL approach, that is very much praxis-oriented.

But how can one attack sophisticated real-life problems without being armed with sophisticated methodological toolkit? Together with Daniel S. Hain, I designed SDS http://sds.aau.dk, a 9th semester (3rd master) option for Social Science students at AAU. The programme started in 2018 and introduces students to Applied Machine Learning, Network Analysis, Natural Language Processing, and Deep Learning (which comprises the foundation for Artificial Intelligence technologies today). The programme also picks up current discussions on privacy and ethics (e.g. algorithmic bias, policy and regulation). It is not about turning all students into "statisticians" but to account for the importance that data plays today in industry and society and to make sure that expertise in this field should not only be found at Science and IT departments but also include a social science perspective. Since Fall 2022 SDS has been rebuild and launched as a full scale master programme in Business Data Science with a stronger focus on Business Application as well as anchoring of Data Science techniques in organizations.

8. Any other information or comments.

Type your answer here...