Curriculum Vitae

Currently, I am pursuing a Ph.D. at the IT University of Copenhagen. My academic focus revolves around Business Intelligence & Analytics and Decision Support Systems. With a foundation laid by my master's thesis on the accessibility of automated deep learning, my research now delves into the decision-making processes involved with leveraging large datasets and complex machine learning algorithms. Professionally, I contribute as a PhD student within the Research Group: Information Systems & Digital Innovation at the IT University of Copenhagen. My ongoing Ph.D. project addresses the growing challenges of leveraging vast data volumes and complex machine-learning algorithms in supporting decision-makers in various fields. This research critically examines the trade-offs between the expanding data volume and machine learning complexity against sustainability and business value. I am currently working on the development of machine learning models for supporting anesthetists, in handling surgical patients' pain and opioid adverse events.

Ansættelse

PhD studerende
Digital Business Innovation
IT-Universitetet i København
1 jan. 2025 → 31 aug. 2026

Information Systems and Digital Innovation
IT-Universitetet i København
Copenhagen, Danmark
1 sep. 2023 → 1 nov. 2026

Publikationer

Examing Approaches and addressing the nesting challenge in Decision Support Systems.
Pedersen, N. K. & Andersen, J. V., aug. 2024.

Sustainability and Business Value of Big Data Analytics and Machine Learning: Data Volume and Algorithmic Complexity: What is the trade-off between data volume and algorithm complexity for machine learning performance?
Pedersen, N. K., 2 okt. 2023.

Midas: a Python Framework for Automated Generating and Training of Neural Network Models
Pedersen, N. K., Meged , A. W. & Johansen , R. A., 6 dec. 2022.

Academic Experiences

2024 – Now
Member of "OPI•AID"
•https://opiaid.dk/
•OPI•AID aims to individualize perioperative opioid treatment to reduce pain, adverse events, complications, and overall opioid use while facilitating effective and high-quality patient care.
•Project: Development of machine learning models and opioid prediction algorithms.

2024
PhD Course: "Frontiers in Digtial Innovation" by the Swedish Center for
Digital innovation.
•"Frontiers in Digital Innovation" by the Swedish Center for Digital Innovation – 7,5 ECTS Point
•"Data Science as a Research Method" by Universität Paderborn – 6 ECTS Point

2023
Teaching Staff – IT University of Copenhagen
•Critical Big Data Management: Second part of the Big Data Specialization within the master's degree Digital Innovation and Management

2022-2023
Lecture Assistant – IT University of Copenhagen
•Big Data Processes: First part of the Big Data Specialization within the master's degree Digital Innovation and

Management
•Critical Big Data Management: Second part of the Big Data Specialization within the master’s degree in Digital Innovation and Management