Jacob Nielsen

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EDUCATION M.sc Computer Science

University of Southern Denmark (SDU)

January 2024

Thesis Title: Object Detection with Transformers from A Drone Perspective

Supervisor: Professor Stefan Jänicke

Bc. Computer Science

University of Southern Denmark (SDU)

January 2022

 ${\it Thesis \ Title:} \ {\it Microservice \ mission \ management \ module \ for \ linear \ infrastructure \ in$

spection

Supervisors: Professor Peter Schneider-Kamp & Ph.D. Lea Matlekovic

PAPERS F

PREPRINT When are 1.58 bits enough? A Bottom-up Exploration of BitNet Quantization

Jacob Nielsen, Lukas Galke & Peter Schneider-Kamp

BitNet b1.58 Reloaded: State-of-the-art Performance Also on Smaller Networks (Accepted DeLTA 2024)

Jacob Nielsen & Peter Schneider-Kamp

Multiview Aerial Visual Recognition (MAVREC) Can Multi-view Improve Aerial Visual Perception? (Accepted CVPR 2024)

Aritra Dutta, Srijan Das, Jacob Nielsen, Rajatsubhra Chakraborty, Mubarak Shah

TEACHING

University of Southern Denmark

Teaching Assistant, Computer Vision DM890 (graduate course)

Spring 2023

Responsible Professor: Aritra Dutta

WORK EXPERIENCE

Worker Saling Group

Full Time, Aug. 2016 - Aug. 2017

Responsible for shift operations, customer advising and sales in electronics depart-

ment and non-food.

Freelance Drone Pilot

Part Time, May. 2017 - Aug. 2018

Aerial imagery capturing for clients. Risk management, radio-tower and police coordination.

ML/AI Engineer, Ordbogen A/S

Full Time, Feb. 2024 -

Employed at RnD department working on various AI products, but extensively in natural language processing. Responsible for turning existing research into products, conducting our own research in co-operation with universities, supervising master's students and summer-interns from various universities, including Massachusetts Institute of Technology.

SKILLS

Languages: Danish (native), English

Computer Skills: Java, Python, C, C++20, CUDA, OpenAcc, Haskell, Erlang, Swift, SQL, Tensorflow, Keras, Pytorch, CUDA, Linux, HPC Platforms, FastAPI,

 ${\bf SQLAlchemy,\ PostgreSQL,\ PostGIS,\ Docker,\ L\!\!\!^{\Delta}\!T_{\!E}\!X},$