Nicklas Hansen

M.Sc. Eng. student and deep learning enthusiast

PERSONAL INFORMATION

Date of birth	02-11-1996	*Phone*	+45 61 26 46 82
Nationality	Danish	*Email*	hello@nicklashansen.com
Location	Copenhagen, Denmark	*Github*	github.com/nicklashansen

PROFESSIONAL EXPERIENCE

(2019 - present) Retune DSP

I help a team of engineers in a 10-man startup company build and maintain deep learning pipelines for automatic speech recognition systems.

(2016 - present) Nordic Transition

I am responsible for development and maintenance of an end-to-end data management platform for a recently established and rapidly growing career consultancy.

(2017 - 2019) Career Panorama

I acted as technical advisor in an early-stage startup aiming to provide a human-centric alternative to current HR systems. Primary responsibility was to enforce good software engineering practices and manage a student developer.

EDUCATION

(2019 - present) M.Sc. Eng. stud. — Technical University of Denmark (DTU)

M.Sc. Mathematical Modelling & Computing student. Current topics include deep reinforcement learning, advanced algorithms, machine learning and digital signal processing. GPA: 9.71 (-3 to 12)

(2015 - 2018) B.Sc. Eng. — Technical University of Denmark (DTU)

B.Sc. Software Engineering. Studies focused on algorithms, machine learning, deep learning, AI, data security and software engineering practices. GPA: 8.18 (-3 to 12)

(2018) Summer Schools— High-Assured Autonomous Systems

Autonomous systems (theory and practice) at Tallinn Technical University, Estonia and Åbo Akademi, Finland.

(2018) Certificate — ISO 21500 Guidance on Project Management, Dansk Standard

I am certified in project management practices in accordance to ISO 21500.

(2017) Exchange — Nanyang Technological University (NTU), Singapore

Topics include computer vision, cryptography and large-scale software engineering.

PROJECTS

(2019) Course work— *Playing Atari Games with REINFORCE & Deep Q-Networks*

Implementation of the REINFORCE, DQN, DDQN and ActorCritic reinforcement learning algorithms with application to several classic Atari games. Public examination at AI Student Expo organised by Neural.

(2019) Course work— *Audio Features for Music Genre Classification*

Benchmark of various audio features (both spectral and time domain) for music genre classification on a large dataset using a deep convolutional neural network (DenseNet) for classification.

(2018) Retune DSP — *Voice Activity Detection in Noisy Environments*

Utilising novel deep learning techniques to increase robustness of low-complexity VAD for embedded systems in highly noisy environments.

(2018) Thesis: Rigshospitalet Glostrup — *Automatic Multi-Modal Detection of Autonomic Arousals in Sleep*

Multi-disciplinary study on the application of deep learning, digital signal processing and algorithms for automatic detection of biomarkers for sleep-related diseases in ECG and PPG signals.

(2017) SimCorp A/S — *Sentiment Analysis on Twitter For Stock Market Prediction*

Automated collection and real-time analysis of tweets from Twitter for stock market prediction. Benchmark of machine learning and deep learning techniques for natural language processing and sentiment analysis.

TECHNICAL

Software Engineering

I am fluent in Python, Matlab, C# and JavaScript, and I also have experience with SQL, R, Maple, C, C++ and Java. I am comfortable working with Git, Azure, Latex and Linux.

Mathematical Modelling

I have a solid understanding of the design and analysis of advanced (sequential and parallel) algorithms and data structures and know how to develop efficient software at scale.
I use PyTorch (Python) for deep learning but have experience with TensorFlow and Keras as well. For digital signal processing applications I use Python, Matlab and JavaScript.

PERSONAL INTERESTS

As an engineer, I want to use my technical skills to build solutions that benefit society. I am highly supportive of innovation and have participated in DTU Skylab's Open Innovation challenge on several occasions.

References are given upon request