Nicklas Hansen

PERSONAL INFORMATION

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

PROFESSIONAL EXPERIENCE

(2019 - present) Teaching Assistant, 02456 Deep Learning — DTU Compute

I work as a TA, create course material and am main supervisor to 40+ students for their final projects.

(2019 - present) Teaching Assistant, 02454 Introduction to Cognitive Science — DTU Compute

(2019) Machine Learning Summer Intern — raffle.ai

Development of a competitive text-to-SQL parser based on deep neural networks.

(2019 - present) Student Developer — Retune DSP

I help a team of engineers build and maintain deep learning pipelines for speech recognition systems.

(2016 - present) Lead Software Developer — Nordic Transition

Development and maintenance of an end-to-end data management platform for a career consultancy.

(2017 - 2019) Student Developer — Career Panorama

I helped build a startup seeking to disrupt the HR industry. Main contribution was prototyping.

EDUCATION

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

M.Sc. Mathematical Modelling & Computation student. Studies focus on advanced topics in machine learning and is supplemented by research on novel applications of deep learning. GPA: 10.2 (-3 to 12)

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

B.Sc. Software Engineering. Studies focused on algorithms, machine learning, AI, cryptography and software engineering practices. GPA: 8.2 (-3 to 12)

(2018) Summer Schools on Autonomous Systems — Åbo Akademi & Tallinn Technical University

Participated in two summer schools on the development of high-assured autonomous systems.

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

A semester devoted to computer vision, cryptography and large-scale software engineering.

HIGHLIGHTED PROJECTS

(2019) Raffle.ai — *From natural language questions to SQL queries*

Implementation of the modular SyntaxSQLNet for use in text-to-sql semantic parsing. Improved the reference model and increased accuracy significantly (from 37% to 49%) on the Spider dataset using less resources.

(2019) *Distributed Deep Reinforcement Learning*

Implementation of A3C for large-scale RL, extended in several ways to improve performance and scalability.

(2019) *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.

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

Utilising novel deep learning techniques to increase robustness of low-complexity VAD in 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*

TECHNICAL

Software Engineering

I am fluent in Python, C# and JavaScript, and I also have experience with C, C++, Matlab, R, SQL, Maple and Java among others. I use Git, Azure, Latex, Linux and HPC clusters on a daily basis.
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 and maintainable software at scale.

Mathematical Modelling

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, C and JavaScript.

LANGUAGES

Danish: mother tongue, ***English***: fluent, ***German***: conversational

References are given upon request