

# Peter Ebert



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## Copenhagen, Denmark

Linkedin: pebertc

Phone: +45 30 62 64 62

Email: [pec@di.ku.dk](mailto:pec@di.ku.dk)

Github: [Captaine.github.io](https://github.com/Captaine)

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## Education

### University of Copenhagen, Ph.D. Student

Aug 2022-, Copenhagen

Advisor: Serge Belongie

### DTU, Msc. in Mathematical Modelling and Computing

Feb 2019- Jul 2021, Copenhagen

Major in Machine Learning, Advisor: Ole Winther, I co-authored an IEEE paper.

### University of California, Berkeley, Msc exchange

Jan 2020- June 2020, Copenhagen

Research exchange, I co-authored a NeurIPS paper with Prof. Dawn Song.

### DTU, Bcs. in Mathematics and Technology

Feb 2019- Jul 2021, Copenhagen

Major in Machine Learning

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## Publication

### Assessing Neural Network Robustness via Adversarial Pivotal Tuning of Real Images

P.E Christensen, V. Snæbjarnarson, A. Dittadi, S. Belongie, S. Benaim, In submission for ICLR 2023

### Searching for Structure in Unfalsifiable claims

P.E Christensen, F. Warburg, M. Jia, S. Belongie, 2022, HCOMP 2022, <https://arxiv.org/abs/2209.00495>

### Volumetric Disentanglement for 3D scene manipulation

S. Benaim, F. Warburg \*, P.E Christensen \*, S. Belongie, 2022, In submission for ICLR 2023

<https://arxiv.org/abs/2206.02776>

### Synthesize, Execute and Debug: Learning to Repair Neural Program Synthesis

K. Gupta, P.E Christensen, X Chen, D Song, Neural Information Processing Systems 2020,

<https://arxiv.org/abs/2007.08095>

### A Deep Learning Approach to Short Term Blood Glucose

### Prediction on Continuous Glucose Monitoring Data

A. Mohebbi, A. Johansen, N. Hansen, P.E Christensen, M. Jensen, J. Tarp, H. Bengtsson, M. Mørup.

Engineering in Medicine and Biology Society (IEEE-EMBC 2020),

<http://dx.doi.org/10.1109/EMBC44109.2020.9176695>

### Autoencoding unidirected molecular graphs with neural networks

J.J.W Olsen, P.E Christensen, M. H. Hansen, A.R. Johansen, 2019, <https://arxiv.org/abs/2001.03517>

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## Experience

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### University of Copenhagen, Research Assistant

Oct 2021-Aug 2022, Copenhagen

Under the supervision of Serge Belongie, I developed the first clustering algorithm for narrative discovery on social media, which can iteratively refine its embedding HCl. I used state-of-the-art transformer models post-process the data and to test the difficulty of the dataset. I also collaborated and coauthored a paper with PostDoc Sagie Benaïm on a project on 3D scene representation.

### Machine Learning Engineer / Corti.ai

August 2020 -August 2021, Copenhagen

I've been responsible for rewriting Corti's production code from Tensorflow 1 to Tensorflow 2. As such due I've been able to decrease the training time more than 30 X and the loading of data more than 7x.

### Machine Learning Intern / Raffle.ai

June 2019- August 2019, Copenhagen

I reimplemented the SyntaxSQLNet cross-domain text-to-SQL parser in PyTorch and Python and improved its accuracy by 12%.

### Student assistant / Technical University of Denmark

June 2019- August 2019, Copenhagen

I helped develop a platform for autonomous materials discovery of clean energy materials through creation of a common data-infrastructure:  
<http://www.aimade.org/>

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## Talks

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(Invited talk) Introduction to Reinforcement Learning, Neural 2019

(Invited talk) Learning the language of molecules, Neural 2019

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## Awards, Service & Visa

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### Fintech Scholarship / Spar Nord foundation (2020)

Scholarship to study for 1 semester at UC Berkeley

### PhD student Cafe administrator (2022-)

I orchestrate talks, workshops, hackathons and other social events for Ph.D. students working within Machine Learning at any Danish University

### Reviewer ACL (2020)

Visa F1 for the USA (2019-2024)

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## Teaching

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Vision and image processing, University of Copenhagen 2022

02456 Deep Learning , Technical University of Denmark 2021

02456 Deep Learning , Technical University of Denmark 2020

02456 Deep Learning , Technical University of Denmark 2019