Bo Li

DOCTORAL CANDIDATE IN APPLIED MATHEMATICS AND COMPUTATION

Viborggade 19, 2100 København Ø, Denmark

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"Work to become, not to acquire"

Education

Technical University of Denmark | *Feb.2021 -*
DOCTORAL CANDIDATE IN APPLIED MATHEMATICS AND COMPUTATION | *Denmark*

Topic: Federated Machine Learning for Spectroscopy

Technical University of Denmark | *Sept. 2016 - Aug. 2018*
MSC IN MATHEMATICAL MODELING AND COMPUTATION | *Denmark*

Specialization: Machine Learning, Deep Learning, Image Analysis

Jilin University | *Sept. 2012 - Jun. 2016*
BSC IN FINANCIAL ENGINEERING. GPA: 3.31/4 RANK 4/41 | *China*

Specialization: Probability and Statistics, Macroeconomics and Microeconomics

Paper

- Bo Li, M. N. S., & Alstrøm, T. S. (2021). Raman spectrum matching with contrastive representation learning. *Analytical chemistry (under review)*.
- Leroux*, S., Li*, B., & Simoens, P. (2022). Automated training of location-specific edge models for traffic counting. *Computers Electrical Engineering*, 99, 107763. *equal contribution
- Sam*, L., Bo*, L., & Pieter, S. (2022, January). Multi-branch neural networks for video anomaly detection in adverse lighting and weather conditions. In *Proceedings of the ieee/cvf winter conference on applications of computer vision (wacv)* (p. 2358-2366). *equal contribution
- Li, B., Leroux, S., & Simoens, P. (2021). Decoupled appearance and motion learning for efficient anomaly detection in surveillance video. *Computer Vision and Image Understanding*, 210, 103249.
- Li, B., & Alstrøm, T. (2020). On uncertainty estimation in active learning for image segmentation. In *Proceedings of 2020 international conference on machine learning: Workshop on uncertainty and robustness in deep learning*.

Research interest

- Contrastive learning, uncertainty quantification, representation learning, federated learning

Work Experience

Teaching assistant for Deep learning, Bayesian machine learning | *Mar 2021 -*
TECHNICAL UNIVERSITY OF DENMARK | *Lyngby, Denmark*

Research assistant for hardware-efficient machine learning | *Jan 2019 - Dec 2020*
GHENT UNIVERSITY | *Gent, Belgium*

Research assistant for active learning in medical image segmentation | *Aug - Nov 2018*
TECHNICAL UNIVERSITY OF DENMARK | *Lyngby, Denmark*

Teaching Assistant for Advanced Data Analysis and Statistical Modelling | *Jan - May 2018*
TECHNICAL UNIVERSITY OF DENMARK | *Lyngby, Denmark*

Computer Skills

ML | **PyTorch, Tesorflow, Keras, Python, Matlab, R, Linux and bash scripting**

Language

Proficient | **English, Chinese**

Honors & Awards

2016-18 | **Danish Innovation Scholarship under DABAI**
2014-15 | **The First-class Scholarship (2/41)**
2014 | **2nd place in the Competition of Innovation and Entrepreneur for Undergraduate Students**