

Xinche (Kessel) Zhang

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EDUCATION

New York University **Sep 2022- Jun 2024**
Master of Science in Computer Science

Dalhousie University **Sep 2018- Jun 2022**
Bachelor of Computer Science GPA: 3.87/4.3(3.8/4)

- First-Class Honours Degree
- 2022 Dalhousie In-Course Scholarship
- Statistics Minor

LABORATORY SKILLS

Programming Language	Python, JavaScript, Java, C/C++, R, SQL, PHP
Network Computing	AWS, Distributed System, MySQL, Nginx
Theoretical Knowledge	Algorithm, Programming Language, Discrete Math, Cryptography, Macroeconomics, Machine Learning, Statistics, Cybersecurity

RESEARCH EXPERIENCE

MPTopic: Improving topic modeling and text clustering algorithms via Masked Permuted Pre-training (Paper under review) **Sep 2021-Aug 2022**
Supervised by Prof. Evangelos Milios, Dalhousie University

- It performs better than baselines in 63% of cases.
- Apply, summarize, compare and contrast machine learning methods to do the semantic analysis

The AlexNet, LeNet-5 and VGG NET applied to CIFAR-10 (Paper published) **May - Oct 2021**
Supervised by Prof. Roman Kuc, Yale University

- Employed CIFAR-10 dataset as the training and test sets.
- Modified the model code with libraries of keras and tested the accuracy of machine learning models like AlexNet, LeNet-5 and VGGNET.
- Used tools of CUDA and cuDNN provided by NVIDIA to run neural network training on GPU.

Grassroots Teaching Organizations Construction **Aug – Dec 2020**
Supervised by Prof. Jie Li, Henan University

- Wrote demand reports according to requirements and objectives.
- Harnessed VUE, Bootstrap, traditional JS, CSS and HTML features to design and develop webpages.
- Participated in software testing and confirmed the implementation of all functions

PUBLICATION & COPYRIGHT

- **Conference Paper (under review):** Zhang, XC. (2022). MPTopic: Improving topic modeling via Masked Permuted pre-training. In: *The 17th Conference of the European Chapter of the Association for Computational Linguistics (EACL 2023)*.
- **Conference Paper (published):** Zhang, XC. (2021). The AlexNet, LeNet-5 and VGG NET applied to CIFAR-10. In: *The 2nd International Conference on Big Data & Artificial Intelligence & Software Engineering*. Zhuhai: IEEE CS CPS(Conference Publishing Services). Submitted for index in IEEE Xplore, EI, Scopus
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