# Peizhi Yan

**Computer Science Masters Candidate (Thesis) I Graduate Assistant**
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"The present is theirs; the future, for which I really worked, is mine." — **Nikola Tesla**

## Education

- **Lakehead University** (2018-present) GPA: 4.0
  Thunder Bay, Ontario, Canada — *Master of Science Student in Computer*
- **Algoma University** (2016-2018) GPA: 4.0
  Sault Ste. Marie, Ontario, Canada — *Bachelor of Science in Computer Science (Hons., Cum Laude)*
- **University of Jinan** (2014-2019), Jinan, Shandong, China — *Bachelor of Science in Computer Science*

## Teaching Experience

- *Computer Vision (2019 Fall)*
  **Guest Tutor**, Lakehead University graduate-level course, 70 students
- *Deep Learning (2019 Spring)*
  **Guest Lecturer**, Lakehead University graduate-level course, 59 students
- *Optimization Method (2019 Spring)*
  **Guest Lecturer**, Lakehead University graduate-level course, 19 students
- *Assembly Language (2019 Winter)*
  **Lab Tutor**, Lakehead University undergraduate-level course, 38 students
- *Data Base Management Systems (2018 Fall)*
  **Lab Tutor**, Lakehead University undergraduate-level course, 25 students

## Academic Experience

- **Reviewer**, IEEE Transactions on Circuits and Systems for Video Technology. (2019)
- **Graduate assistant**, Lakehead University (2018-present)
- **Research assistant** (on artificial neural networks) at Brain Computer Interface lab, Algoma University, Canada (2017-2018)
- **Vice-minister** of Software Department of Turing Computer Association, University of Jinan, China (2015-2016)

## Technical Skills

- **Programming Languages:** Python, Java, C++, C, JavaScript, HTML5
- **Operating Systems:** Unix/Unix-like OS, Windows, iOS and Android development
- **Open Source Libraries:** OpenCV, Tensorflow, SciPy, Gurobi
- **Others:** LATEX, MySQL, Firebase

## Domain Knowledge

- Computer Vision and Image Analysis
- Machine Learning, Artificial Neural Networks and Deep Learning
- Big Data Analysis
- Algorithm Design
- Object-Oriented Programming and Object-Oriented Design

## Publications

***Published:***

- **Yan, P.**, Choudhury, S., & Wei, R. (2019, May). A Distributed Graph-Based Dense RFID Readers Arrangement Algorithm. In *ICC 2019-2019 IEEE International Conference on Communications (ICC)* (pp. 1-6). IEEE.
- **Yan, P.**, & Feng, Y. (2018). Using Convolution and Deep Learning in Gomoku Game Artificial Intelligence. Modern Physics Letters A, 28(03), 1850011.
- **Yan, P.**, & Feng, Y. (2018, December). A Hybrid Gomoku Deep Learning Artificial Intelligence. In *Proceedings of the 2018 Artificial Intelligence and Cloud Computing Conference* (pp. 48-52). ACM.

***Submitted:***

- **Yan P.**, Choudhury S., & Wei R.. A Machine Learning Auxiliary Approach for the Distributed Dense RFID Readers Arrangement Algorithm. *IEEE Access on Intelligent and Cognitive Techniques for Internet of Things.*
- **Yan P.**, Al-turjman F., Al-Oqily I., & Choudhury S.. An Energy-Efficient Topology Control Algorithm for Optimizing the Lifetime of Wireless Information-Centric IoT Networks. *Future Generation Computer Systems.*
- Tassone J., **Yan P.**, Simpson M., Mendhe C., Mago V., & Choudhury S.. Utilizing Twitter Data Analysis and Deep Learning to Identify Drug Use. *IEEE Access*.

## Awards and Honors

- (2019) **Faculty Research Award** (Lakehead University faculty of Computer Science)
- (2019) **International Match Fund Award** (Lakehead University)
- (2019) **Faculty of Science and Environmental Studies Award** (Lakehead University)
- (2018) **Vector Scholarships in Artificial Intelligence (VSAI)** by Vector Institute, $17,500 (CAD)
- (2018-2019) **Graduate Assistantship** (Lakehead University)
- (2018) **Faculty Research Award** (Lakehead University faculty of Computer Science)
- (2018) **Lakehead University Entrance Award**
- (2018) **Lakehead University International Entrance Award**
- (2018) **Faculty of Science and Environmental Studies Entrance Award** (Lakehead University)

## Projects

- (Ongoing) **Deep Learning Satellite Image Lichen Mapping** (in collaboration with NCASI)
- (2019) Web-based **Painting Application** (https://peizhiyan.github.io/www/draw.html)
- (2019) A Tensorflow implementation of **Extreme Learning Autoencoder** (open source)
- (2019) **Deep Learning 4X Video Super-Resolution**
- (2018-2019) **Utilizing Twitter Data Analysis and Deep Learning to Identify Drug Use**
- (2018) **Deep Learning Portrait Mode Photo Generator**
- (2018) **Distributed Dense RFID Readers Arrangement Algorithm**
- (2018) **Convolution-Based Gomoku Game Evaluation Algorithm**
- (2017-2018) Undergraduate Thesis Project: **Using Machine Learning in Gomoku Game**

# Other Interests

- Painting
- Reading