PEIZHI YAN

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Education

- **Lakehead University** (2018-present) GPA: 4.0 / 4.0 (98%)
  Thunder Bay, Ontario, Canada — ***Master*** *Student in Computer Science*
  Supervisor: Dr. Salimur Choudhury
  Co-supervisor: Dr. Shan Du
- **Algoma University** (2016-2018) GPA: 4.0 / 4.0 (96%)
  Sault Ste. Marie, Ontario, Canada — ***B.Sc.*** *in Computer Science (Honors, Cum Laude)*
  Thesis supervisors: Dr. Yi Feng, Dr. George Townsend
- **University of Jinan** (2014-2019), Jinan, Shandong, China — ***B.Eng.*** *in Computer Science*

Teaching Experience

Lakehead University

- **Tutor:** *Deep Learning (2020 Winter),* graduate-level course, 83 students
- **Tutor:** *Computer Vision (2019 Fall),* graduate-level course, 70 students
- **Guest Lecturer:** *Deep Learning (2019 Spring)*, graduate-level course, 59 students
- **Guest Lecturer:** *Optimization Method (2019 Spring)*, graduate-level course, 19 students
- **Tutor:** *Assembly Language (2019 Winter)*, undergraduate-level course, 38 students
- **Tutor**: *Data Base Management Systems (2018 Fall)*, undergraduate-level course, 25 students

Academic Experience

- **Reviewer**, IEEE Transactions on Circuits and Systems for Video Technology.
- **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 Development Sector of Turing Computer Association, University of Jinan, China (2015-2016)

Publications

Published

- **Yan P.**, Choudhury S., & Wei R. (2020). 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.**, 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.

Accepted

- **Yan, P.**, & Choudhury, S., Optimizing Mobile Edge Computing Multi-Level Task Offloading via Deep Reinforcement Learning. In *ICC 2020-2020 IEEE International Conference on Communications (ICC)*. IEEE.

- Emu M., **Yan P**., Choudhury S., (2020). Latency Aware VNF Deployment at Edge Devices for IoT Services: An Artificial Neural Network Based Approach. In *ICC 2020-2020 IEEE International Conference on Communications (ICC) Workshop on Convergent IoT*. IEEE.

Submitted

- Liu Y., Li S., Liu M., **Yan P.**, Huang X., & Du S., No-reference stereoscopic image quality assessment by combining global and local features, under revision, submitted to *IEEE Transactions on Circuits and Systems for Video Technology*, 2019.
- Paul A., **Yan P.**, & Yang Y., Online Sequential Learning with Non-Iterative Strategy for Dimension Reduction and Image Classification, submitted to *IEEE Transactions on Systems, Man and Cybernetics.*
- **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

External

- (2018-2019) **Vector Scholarships in Artificial Intelligence (VSAI)** by Vector Institute, $17,500

Lakehead University

- (2019) **International Match Fund Award**
- (2019) **Faculty of Science and Environmental Studies Award**
- (2018, 2019) **Graduate Assistantship**
- (2018, 2019) **Faculty Research Award**
- (2018) **Lakehead University Entrance Award**
- (2018) **Lakehead University International Entrance Award**
- (2018) **Faculty of Science and Environmental Studies Entrance Award**

Projects

Research projects

- (Ongoing) **Deep Learning Satellite Image Lichen Mapping** (in collaboration with NCASI Inc., funded by NSERC)
- (2019) **Deep Learning 4X Video Super-Resolution** (https://www.youtube.com/watch?v=W8TxAPylE0Y)
- (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**
- (2017-2018) Undergraduate Thesis: **Using Machine Learning in Gomoku Game**

Other projects

- (Ongoing) **BPPV Mobile App** for healthcare training (Android and iOS)
- (2019) Open source web-based **Painting Application** (https://peizhiyan.github.io/www/draw.html)
- (2019) A Tensorflow implementation of **Extreme Learning Autoencoder** (https://github.com/PeizhiYan/ELA)
- (2018) **Convolution-Based Gomoku Game Evaluation Algorithm** (https://peizhiyan.github.io/js_codes/gomoku/index.html)

Skills

- **Programming languages:** Python, Java, C++, C, JavaScript, HTML5, CSS3, swift
- **Open source libraries:** OpenCV, Tensorflow, Keras, SciPy, Gurobi, Paper.js
- **Others:** Latex, Xcode IDE, Linux OS, Matlab, Adobe Photoshop, Adobe Illustrator