Peizhi Yan (颜培郅)

Computer Science Master's Student (Thesis) | Graduate Assistant

Lakehead University 955 Oliver Rd, Thunder Bay, ON, P7B 5E1

Phone: +1 705-943-0919 Email: pyan@lakeheadu.ca

Personal homepage: https://peizhiyan.github.io/

"The present is theirs; the future, for which I really worked, is mine." — **Nikola Tesla**

Education

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

Teaching Experience

- Deep Learning (2019 Spring)
 - Guest Lecturer, Lakehead University graduate student course, 59 students
- Optimization Method (2019 Spring)
 - Guest Lecturer, Lakehead University graduate student course, 19 students
- Assembly Language (2019 Winter)
 - Lab TA, Lakehead University undergraduate student course, 38 students
- Data Base Management Systems (2018 Fall)
 - Lab TA, Lakehead University undergraduate student 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:

- Peizhi Yan, Salimur Choudhury, & Ruizhong Wei, (2019). A Distributed Graph-Based Dense RFID Readers Arrangement Algorithm. *IEEE International Conference on Communications* (*ICC*): Mobile and Wireless Networks Symposium, May 20-24, 2019, Shanghai, China.
- Peizhi Yan, & Yi Feng, (2018). Using Convolution and Deep Learning in Gomoku Game Artificial Intelligence. *Modern Physics Letters* A 28, no. 03 (2018): 1850011.
- Peizhi Yan, & Yi Feng, (2018). A Hybrid Gomoku Deep Learning Artificial Intelligence. Artificial Intelligence and Cloud Computing Conference, Dec 21-23, 2018, Tokyo, Japan. (ISBN: 978-1-4503-6623-6)

Submitted:

- Peizhi Yan, Salimur Choudhury, & Ruizhong Wei. A Machine Learning Auxiliary Approach for the Distributed Dense RFID Readers Arrangement Algorithm. *IEEE Access on Intelligent and Cognitive Techniques for Internet of Things.*
- Peizhi Yan, Fadi Al-turjman, Ibrhaim Al-Oqily, & Salimur Choudhury. An Energy-Efficient Topology Control Algorithm for Optimizing the Lifetime of Wireless Information-Centric IoT Networks. Future Generation Computer Systems.
- Joseph Tassone, Peizhi Yan, Mackenzie Simpson, Chentan Mendhe, Vijay Mago, & Salimur Choudhury. Utilizing Twitter Data Analysis and Deep Learning to Identify Drug Use. *IEEE Access*.

Awards and Honors

- Faculty Research Award (Lakehead University faculty of Computer Science), 2019-2020
- International Match Fund Award (Lakehead University), 2019-2020
- Faculty of Science and Environmental Studies Award (Lakehead University), 2019-2020

- Vector Scholarships in Artificial Intelligence (VSAI) by Vector Institute, \$17,500 (CAD), 2018-2019
- Graduate Assistantship (Lakehead University), 2018-2019
- 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),
 2018
- Graduated Cum Laude (Algoma University, Bachelor of Science) with last two years' GPA 4.0, 2018

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)
- (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