# MOHAMED AZZAM

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### **SUMMARY**

Currently, I am an assistant professor at Menoufia University (Egypt), department of Compuer Science and Engineering (CSE). My research work lies at the intersection of computer vision and deep learning. Namely, in generative modeling, domain adaptation, and representation learning. I received the PhD's degrees in CSE from City university of Hong Kong and Master's degrees in CSE from Huazhong University of Science and Technology (China) in 2018. Prior to pursuing the master's degree, I was working as a teaching assistant at Menoufia University, with various experience in C++ programming and data structures with algorithms. In 2014, I received my BSc in CSE from Menoufia University.

#### **EDUCATION**

City University of Hong Kong (CityU), Hong Kong S.A.R September &

September 2018 - August 2021

PhD in Computer Science and Engineering Advisor: Dr. Wong Hau San (Raymond)

GPA: 4.00/4.00

Thesis: Deep Unsupervised Visual Domain Adaptation via Discriminative Adversarial Learning

Huazhong University of Science and Technology (HUST), China October 2016 - July 2018

MSc in Computer Science Advisor: Prof. Tianjiang Wang

Grade: Excellent(93.39%)

Thesis: Reference Frame Based Descriptors of Local Surface in 3D Scene Understanding

Menoufia University, Egypt

September 2009 - July 2014

BSc in Computer Science & Engineering

Advisor: Prof. Gamal Attiva

Grade: Excellent with Honor Degree (90.94%)

Graduation Project: Online Tracking of Trains (Funded by National Telecommunications Regulatory

Authority)

#### PUBLICATION

- 1. Haohong Zhou, **Mohamed Azzam**, Jian Zhong, Cheng Liu, Si Wu, and Hau-San Wong. "Knowledge Exchange between Domain-Adversarial and Private Networks Improves Open Set Image Classification." IEEE Transactions on Image Processing, 2021. (Impact Factor: 9.34)
- 2. Mohamed Azzam, Si Wu, Aurele Tohokantche Gnanha, Qianfen Jiao, and Hau-San Wong. "Unsupervised Domain Adaptation via Cluster Alignment with Maximum Classifier Discrepancy.", IEEE International Conference on Multimedia and Expo (ICME) 2021. (Oral Presentation) (Acceptance rate (oral): 15%)
- 3. Mohamed Azzam, Si Wu, Yang Zhang, Aurele Tohokantche Gnanha, and Hau-San Wong. "Adversarially Smoothed Feature Alignment for Visual Domain Adaptation.", The International Joint Conference on Neural Networks (IJCNN) 2021.
- 4. Shixin Huang, Xiangping Zeng, Wu Si, Zhiwen Yu, **Mohamed Azzam**, and Hau-San Wong. "Behavior-based Regularization ProtoNet for Semi-Supervised Few-Shot Learning.", Pattern Recognition, 2020. (Impact Factor: 7.196)

- 5. Mohamed Azzam, Aurele Tohokantche Gnanha, Hau-San Wong, and Si Wu. "Adversarially Constrained Interpolation for Unsupervised Domain Adaptation.", 25<sup>th</sup> International Conference on Pattern Recognition (ICPR) 2020, Jan. 2021.
- 6. Mohamed Azzam, Wenhao Wu, Wenming Cao, Wu Si, and Hau-San Wong. "KTransGAN: Variational Inference-Based Knowledge Transfer for Unsupervised Conditional Generative Learning.", IEEE Transactions on Multimedia, 2020. (Impact Factor: 6.051)
- 7. Wu Si, Sihao Lin, Wenhao Wu, **Mohamed Azzam**, and Hau-San Wong. "Semi-Supervised Pedestrian Instance Synthesis and Detection With Mutual Reinforcement.", In Proceedings of the IEEE International Conference on Computer Vision (ICCV), pp. 5057-5066. 2019. (Acceptance rate: 25%)
- 8. Si Wu, Jichang Li, **Mohamed Azzam**, Zhiwen Yu, and Hau-San Wong. "Deep Co-Adaptation: Learning with Untrusted Peer Networks for Semi-Supervised Image Recognition." In IEEE Transactions on Neural Networks and Learning Systems. (Under review)
- 9. Qianfen Jiao, Jian Zhong, Si Wu, **Mohamed Azzam**, Wenming CAO, Cheng Liu, and Hau-San Wong. "Collaborative Learning for Low-quality Face Verification: Cross-domain Image Enhancement and Adversarial Defense.", IEEE Transactions on Multimedia. (Submitted)

# RESEARCH & WORK EXPERIENCE

#### Assistant Professor

June 2022 - Present

Menoufia University

Eqypt

- · <u>Courses</u>: Computer Vision (CSE416), Computer Networks (CSE363), Digital Image Processing (CSE325), Data Science (CSE342), Artificial Intelligence 1 (CAI2603), Predictive Analytics(CSE372), Computer Skills (COMP 0200), Computer Applications (COMP 0210)
- · Seminars: Deep Visual Unsupervised Domain Adaptation
- · Graduation Projects Under my supervision: 1. Automated Citrus Sorting System 2. Attendance Management System by Face Recognition

**Potdoctoral Fellow** 

Dec. 2021 - May 2022

Chinese University of Hong Kong

Hong Kong SAR

Research topics: Multimodal Domain problems.

### Teaching Assistant

January 2019 - Aug. 2021

City University of Hong Kong

Hong Kong SAR

- · Courses: Fundamentals of Data Science (CS2611), Multimodal Interface Design (CS3483)
- · Seminars: Introduction to Deep learning

## Teaching Assistant

January 2015 - October 2016

Menoufia University

Egypt

- · Courses: C++ Programming and Data Structures & Algorithms
- · Collaborated in developing software (Automatic Reporting of Students' Activities in the class)
- · Guided the senior students in preparing their graduation projects.

#### Undergraduate Student

September 2013 - June 2014

Menoufia University

Egypt

- $\cdot$  Designed the system architecture of the graduation project.
- · Developed the GUI of the embedded devices of the graduation project with the help of the QT packages.

# **INTERNSHIPS & ACTIVITIES**

Internship, IBM company February 2016

Cloud Application Developer

Internship, EMC<sup>2</sup> Company

August 2015

Information Storage & Management

Internship, EMC<sup>2</sup> Company

June 2014

Cloud Infrastructure & Services

Internship, Technology Innovation and Entrepreneurship Center(TIEC)

January 2014

Innovation & Entrepreneurship.

# COMMUNITY INVOLVEMENT

- Reviewer: IEEE TMM, IEEE TNNLS, and ICME Conference.

– Served as a college board member of computer science at CityU. September 2019 - August 2020

- Guided the new international students during university registration process. February 2017

# HONORS & AWARDS

Fellowship, HKPFS – Research Grants Council of Hong Kong September 2018 - August 2021

PhD at CityU University

Award, International Student Office

April 2017

Excellent Volunteer at HUST University

Scholarship, Chinese Government

October 2016 - July 2018

Master Degree at HUST University

Award, Egyptian Engineering Syndicate

January 2015

Academic Distinction

Fellowship, Egyptian Government

September 2009 - July 2014

Bachelor Degree at Menoufia University

# TECHNICAL SKILLS

Computer Languages Python, C/C++, Matlab, Latex

Operating System Ubuntu(Linux distribution), Windows 10

Frameworks TensorFlow, PyTorch, Point Cloud Library, OpenCV Library

Tools PyCharm, Eclipse, Emacs, Vim, Git Hardware Raspberry Pi, Arduino, PIC, Atmega32

## **OTHERS**

Languages Arabic (Mother-tongue), English (Excellent – written & spoken), Chinese (Basic)

Hobbies Tennis, Swimming, Reading

Citizenship Egyptian