NG KAM WOH

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EDUCATION

University of Malaya (Kuala Lumpur, Malaysia) *August 2015 - January 2019*
Bachelor of Computer Science (Artificial Intelligence) *CGPA: 3.89/4.00*

University of Surrey (Guildford, England) *October 2021 - October 2024*
Vision, Speech and Signal Processing PhD

RESEARCH INTEREST

Deep Learning
Computer Vision
Image Retrieval
Deep Visual Representation Learning

TECHNICAL EXPERTISE

Programming & Scripting	Python, Java, C/C++/C#, Bash, HTML5/CSS3/Javascript
Development Framework	ReactJS, Flask
Deep Learning Framework	PyTorch, Tensorflow

WORKING EXPERIENCES

AI Department *Nov 2019 - Mar 2021*
WeBank, Shenzhen, China
AI Researcher

◇ Under supervision of Dr. Lixin Fan.
◇ Contributed in the workshops of IEEE BigData 2020 and AAAI 2021.
◇ Contributed in editing Springer book.
◇ Research focus related to security in Federated Learning (such as privacy protection, adversarial defense).

Center of Image and Signal Processing *Feb 2019 - Oct 2019*
University of Malaya, Kuala Lumpur, Malaysia
Research Assistant

◇ Under supervision of Associate Professor Dr. Chan Chee Seng (UM) and Dr. Lixin Fan (WeBank).
◇ Research focus on AI security.

MoneyLion Malaysia Sdn Bhd *Mar 2019 - Aug 2019*
Kuala Lumpur, Malaysia
AI Researcher (Part-time)

◇ Research focus on analyzing transaction using interpretable machine learning .

Xendity Pte Ltd *Sep 2018 - Feb 2019*
Kuala Lumpur, Malaysia
AI Engineer

◇ Responsible to build and improve OCR technology for e-KYC system.

Center of Image and Signal Processing *Jul 2016 - Aug 2016*
University of Malaya, Kuala Lumpur, Malaysia
Research Intern

◇ Under supervision of Dr. Chan Chee Seng.
◇ Built a deep learning based Malaysia car plate recognition system.

TEACHING EXPERIENCE

Faculty of Computer Science and Information Technology *Sep 2016 - Dec 2018*
University of Malaya, Kuala Lumpur, Malaysia
Teaching Assistant

WIX1002 Fundamentals of Programming	Semester 1, Academic Session 2018/ 2019
WIA1002 Data Structures	Semester 2, Academic Session 2017/ 2018
WIA1002 Data Structures	Semester 2, Academic Session 2016/ 2017
WIX1002 Fundamentals of Programming	Semester 1, Academic Session 2016/ 2017

ACHIEVEMENT HIGHLIGHTS

AI RELATED

IKCEST Bigdata Challenge 2019	36th Place	[Link]
Grab AI for S.E.A. Challenge	Top 10	[Link]

COMPETITIVE PROGRAMMING

E-Genting Programming Competition 2018	First Prize	[Link]
ACM-ICPC Malaysia al-Khawarizmi National Programming Contest 2018	Second Prize	[Link]
Prosolve National Programming Competition 2018	Third Prize	
UNICODE Programming Contest 2017	Second Runner-Up	
ATURKREATIF'17 Open Programming Competition	First Runner-Up	
E-Genting Programming Competition 2017	Second Prize	[Link]

OTHERS

KPMG Security Challenge 2018 Malaysia	4th Place	
HEREMYHACK Virtual Hackathon 2018	Second Prize	[Link]
Park of the Future Hackathon 2018	Open Category Winner	[Link]
F-Secure Intervarsity Cyber Security Competition 2017	Top 5	[Link]
Sunway CityHack 2017	First Prize	
Unlock Asia AI Robot & Big Data Hackathon 2016	First Prize	

AWARDS

Dean's Special Award *May 2019*
Faculty of Computer Science and Information Technology, University of Malaya
Awarded for my exceptional co-curricular and academic achievements.

Excellent Academic Project Award *May 2019*
Faculty of Computer Science and Information Technology, University of Malaya
Selected and awarded as the best academic project in the department. Work is accepted in AAAI-19 Workshop on Network Interpretability for Deep Learning.

ADDITIONAL EXPERIENCE

1. AAAI 2021 workshop: "Towards Robust, Secure and Efficient Machine Learning" organizing committee. [Link]
2. AAAI 2021 reviewer.
3. Contributed for development of CosMos, a system to monitor COVID-19 patients in Malaysia. [News]
4. Experienced in OCR engine development.

PUBLICATIONS

Conferences/ Workshops

1. Ding Sheng Ong, Chee Seng Chan, Kam Woh Ng, Lixin Fan, Qiang Yang. **Protecting Intellectual Property of Generative Adversarial Networks from Ambiguity Attack.** In Conference on Computer Vision and Pattern Recognition, 2021. [Link to Paper]

2. Lixin Fan, Kam Woh Ng, Ce Ju, Tianyu Zhang, Chang Liu, Chee Seng Chan, Qiang Yang. **Rethinking Privacy Preserving Deep Learning: How to Evaluate and Thwart Privacy Attacks.** Federated Learning: Privacy and Incentive, 2020. [Link to Paper]

3. Lixin Fan, Kam Woh Ng, Ce Ju, Tianyu Zhang and Chee Seng Chan. **Deep Polarized Network for Supervised Learning of Accurate Binary Hashing Codes.** In the 29th International Joint Conference on Artificial Intelligence (IJCAI), 2020. [Link to Paper]

4. Lixin Fan, Kam Woh Ng, Chee Seng Chan. **Rethinking deep neural network ownership verification: Embedding passports to defeat ambiguity attacks.** In 33th Conference on Neural Information Processing Systems (NeurIPS), 2019. [Link to Paper]

5. Kam Woh Ng, Lixin Fan, Chee Seng Chan. **A Universal Logic Operator for Interpretable Deep Convolution Networks.** In AAAI-19 Workshop on Network Interpretability for Deep Learning. [Link to Paper]

PATENTS

1. CN Patent CN111,626,408 A. **Hash coding method, device and equipment and readable storage medium.**

2. CN Patent CN111,652,356 A. **Neural network model protection method, device, equipment and readable storage medium.**

3. CN Patent CN111,783,956 A. **Neural network model protection method, device, equipment and readable storage medium.**