# Weiwen LIU

#### Education

2016–Present **PhD, Computer Science**, *The Chinese University of Hong Kong*, Hong Kong, *GPA* – 3.71/4.00.

Course: pattern recognition, probabilistic models, deep learning, matrix analysis, optimization

2013–2016 **BS, Computer Science**, South China University of Technology, Guangzhou, GPA – 3.87/4.00.

National Scholarship

#### Research Work

#### Personalized Recommendation based on Bandits Algorithms

Title Exploration in Web Page Recommendation: A Contextual DCM Bandit Approach

Author Weiwen Liu, Shuai Li, Prof. Shengyu Zhang

Description We proposed a contextual DCM bandits algorithm to generate a list of recommendations, which can automatically balance between exploration and exploitation.

Status Accepted by COCOON 2018

Personalized Recommendation based on Deep Learning Algorithms

Title Field-aware Probabilistic Embedding Supported Neural Network for CTR Prediction

Author Weiwen Liu, Jiajin Li, Prof. Shengyu Zhang

Description We proposed a Fieldaware Probabilistic Embedding supported Neural Network (FPENN) for CTR prediction, which has both good effectiveness and generalization ability.

Status Submitted to RecSys 2018

Face liveness Detection

Title Face Liveness Detection Using a Flash against 2D Spoofing Attack

Author Prof. Patrick Chan, Weiwen Liu, Danni Chen

Description In this work, we designed a simple and efficient face liveness detection method to improve the security of face recognition systems. The experimental results confirm the accuracy and robustness of our method.

Journal IEEE Transactions on Information Forensics and Security

## Projects

2016-Present Personalized Recommendation for Huawei App Store

Collaborator Huawei Technologies Company Limited Responsibility Algorithm design and implementation

Description Design Ads recommendation algorithms to balance the accuracy and the diversity.

May, Fairness in Multi-stakeholder Recommender System

2018-Aug,

2018

Collaborator Prof.Robin Burke, School of Computing, DePaul University

Description Try to consider fairness problem in personalized recommender systems.

### Skills

Programming Python, Matlab, C++, Java, LaTeX

Language Chinese, English

Communication Oral presentation at ICMLC & ICWAPR 2016