Kevin Michael (Chi-Wen) Chen

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SUMMARY

Two years of solid research experience in machine learning and wireless network communication. Skilled in problem-solving, mathematical derivation, data visualization, deep learning, and Python programming. Enthusiastic about art and technology. With proactive, striving personality and self-learning, well-communication ability.

RESEARCH INTERESTS

Deep Learning, Interpretable Machine Learning, Wireless Signal Recognition for IoT, Network Communication, Signal Processing

EDUCATION

National Taiwan University (NTU)   Taipei, Taiwan
Master of Science in Electrical Engineering, Computer Science Group   *2015 – 2017*
- Master Thesis: Automated Cloud Sandbox Deployment for Implementing DevOps
- Overall GPA: 3.5/4

National Cheng Kung University (NCKU)   Tainan, Taiwan
Bachelor of Science in Photonics   *2011 – 2015*

EXPERIENCE

CITI, Academia Sinica   Taipei, Taiwan
Full-Time Research Assistant, Advisor: Dr. Ronald Y. Chang   *Jan. 2019 – Present*
- 2 first-author IEEE publications on the issues of indoor localization with wireless signals [1],[2].
- Improved more than 5% performance on device-free indoor localization with CSI via deep learning.
- Developed a visual interpretation scheme for deep learning models for device-free indoor localization with CSI.
- Proposed a 20% improved accuracy semi-supervised GAN model on device-free indoor localization with 1% labeled samples, compared to supervised model.

Taipei Digital Group   Taipei, Taiwan
Data Science Intern   *Summer, 2016*
- Team-worked on a project to discriminate content farm from the website via machine learning approach.

Automated Verification & Software Testing Lab, NTU   Taipei, Taiwan
Grad. Research Assistant, Advisor: Dr. Farn Wang   *2015 – 2017*
- Proposed a software framework *DevOpser* to speed up DevOps deployment with OpenStack. This paper was accepted into Taiwan Conference on Software Engineering (TCSE) 2017 best English paper finalist [3].

Publications

1. **Kevin M. Chen** and R. Y. Chang, "Semi-Supervised Learning with GANs for Device-Free Fingerprinting Indoor Localization", IEEE Global Communications Conference (GLOBECOM), December 2020

2. **Kevin M. Chen**, R. Y. Chang and S.-J. Liu, "Interpreting Convolutional Neural Networks for Device-Free Wi-Fi Fingerprinting Indoor Localization via Information Visualization", IEEE Access, vol. 7, pp. 172156-172166, 2019

3. **Chi-Wen Chen** and Farn Wang, "Automated Cloud Sandbox Deployment for implementing DevOps", Taiwan Conference on Software Engineering (TCSE), July 2017

Languages and Skills

Programming Languages: Python (*main*), Java, C++, MATLAB
Spoken Languages: Mandarin (*native*), Taiwanese (*native*), English (*fluent*), Japanese (*elementary*)
Technologies: Deep Learning (TensorFlow/Keras/scikit-learn), Web Design (HTML/CSS/JavaScript)
Others: Acoustic Guitar (*10+ years experience*), Illustration, Digital Painting, Photoshop

Leadership

Student Association of Photonics Department, NCKU   2013 – 2014
Director of Artistic Design
- Responsible for the design of our department's uniform (3 times), stuff for activities, and building decoration.

Photonics Camp, NCKU   Winter, 2014
Director of Artistic Design Section
- In charge of 100+ students camp's theme, uniforms, poster and guide.

Volunteer and Activities

Volunteer: Tutor at Municipal Sie-Jin Elementary School, Tainan, Taiwan   2014
- Tutored 20+ students 2 hours per week in English.

Artistic Design: Camp of University Life at NCKU   2013
Membership: NTU Guitar Club   2016–2017
Music Competitions: NCKU Folk Award 2013, 2014, Tainan, Taiwan; STUST South Star 2015, Tainan, Taiwan

Academic Services

Reviewer: IEEE International Conference on Communications (ICC) 2020, 2021
Presenter: IEEE Global Communications Conference (GLOBECOM) 2020