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# Kevin Michael (Chi-Wen) Chen

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INSPIRE, Department of Electrical and Computer Engineering, The Ohio State University Dreese Labs 713, 2015 Neil Avenue, Columbus, OH 43210, USA

# 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

#### INSPIRE@OhioState

Columbus, Ohio

Graduate Research Assistant

2022-present

Advisor: Dr. Avlin Yener

#### The Ohio State University (OSU)

Columbus, Ohio

PhD student in Electrical and Computer Engineering

2022 - present

Advisor: Dr. Parinaz Naghizadeh, co-advised by Dr. Aylin Yener

## CITI, Academia Sinica

Taipei, Taiwan

Full-Time Research Assistant, Advisor: Dr. Ronald Y. Chang

2019 - 2021

- 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, "A Comparative Study of Deep-Learning-Based Semi-Supervised Device-Free Indoor Localization", IEEE Global Communications Conference (GLOBECOM), December 2021
- 2. **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
- 3. **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
- 4. 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

Memberships: Department Baseball Team at NCKU, NTU Guitar Club

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