# TING-YIN CHANG CHIEN

### Education

# The University of Texas at Austin

Aug. 2021 - Present

 $Master\ of\ Science\ in\ Computer\ Science$ 

• Expected graduation: Dec. 2022

Sep. 2009 – June 2013

# National Taiwan University

Scp. 2000 -

Bachelor of Science in Computer Science and Information Engineering (CSIE)

 $Taipei, \ Taiwan$ 

Austin, TX

• Overall GPA: 3.74/4.0, Major: 3.86/4.0

# Skills

Practice Web Development (React, Django), Internet of Things (Modbus, PLC), Machine Learning

Coding Python, C/C++, Java, JavaScript, TypeScript, HTML/CSS, C#, SQL

**Technology** Linux, Git, Adobe Experience Manager, Microsoft Azure, Google Cloud Platform

Language Mandarin (Native), English (Proficient), Japanese (Advanced)

# Experience

# Software Engineer

Sep. 2020 - July 2021

Change Healthcare | Shop Book and Pay (SBP), Digital Experience Platform

Taipei, Taiwan

- Developed the e-commerce platform solution on Java based CMS Adobe Experience Manager (AEM) that allows patients to search medical services costs and give them out-of-pocket estimation with their insurances.
- Designed an automation program using Python & Selenium to build and verify over 50 tenant-specific SBP sites, reducing time by more than 66% from 3 days to 1 day for each site.
- Implemented automated E2E test framework to test for SBP UI regressions and CMS compliance using PyTest.
- Developed the front-end using React with responsive web design, improving 40% user experience on different devices.

#### Research Assistant

Apr. 2018 – Aug. 2020

National Taiwan University | Medical Computer-Aided Diagnosis System Lab, Dept. of CSIE

Taipei, Taiwan

- Conducted research on tumor-related images (breast tumor, lymph node, lung nodule images, etc.) detection and classification using machine learning/deep learning methods.
- Reduced 87% of false positives (from 29.35 to 3.8) at 98% sensitivity (AUC = 0.961) and reduced 90% of execution time (from 11 sec. to 1 sec.) in tumor detection using the modified object detection system YOLOv3.
- Designed experiments, visualized test statistics, and cooperated with researchers and companies.

#### Software Engineer

Jan. 2014 - Mar. 2016

Brogent Technologies Inc.

Kaohsiung, Taiwan

- Developed the central control system of two 4-D, somatosensory, 100-seat rides in C/C++ with ModBus, PLC and serial communication.
- Designed a general UI in C#, saving 50% of UI implementation time for other control systems.
- Led a team of four software engineers in two full-year projects: Yumble 4-D Theatre (Roermond, Netherlands) and Wildlands Adventure Zoo Emmen 4-D Theatre: Arctic 1 (Emmen, Netherlands).
- Installed facilities, coordinated with subcontractors on-site, collaborated with mechanical and electrical engineers, and provided customer support.

## **Projects**

# Lottery webpage

Dec. 2018

- Developed a webpage for drawing the lottery using Django.
- Designed the front-end and adjusted interfaces as per the customer's requirements in JavaScript and HTML/CSS.
- Implemented the back-end with NoSQL database to let users import and modify awards and name lists.

# Additional Experience

#### WWOOF (Volunteering) and Working Holiday in Japan / Australia / New Zealand

2016 - 2018

• Volunteered and worked in various industries, such as ranching, farming, and dining. Communicated with travelers and local residents in Japanese and English, with full exposure to foreign cultures.

## Public Relations Manager, CSIE Student Association

2011 - 2012

• Held 3 alumni forums for student career planning, developed campaigns and sought sponsorship.