Wan-Xuan Zhu

+886-909-561-285 | wxn.zhu@gmail.com | linkedin.com/in/Wan-Xuan-Zhu

EDUCATION

National Taiwan University   Sep. 2021 – Jun. 2023

M.S. in Graduate Institute of Networking and Multimedia   Taipei, Taiwan

- Master Thesis: Developed the pitch detection system in collaboration with the National Symphony Orchestra.

EXPERIENCE

Research Assistant, National Taiwan University   Mar. 2021 – Sep. 2021

Python, Swift, InfluxDB, Git / Python   Taipei, Taiwan

- Reduced manual data collection workload by 99% from 360 times to 1 time a month for 1,767 patients at NTUH.
  * Developed the automated psychiatric patient monitoring system with frontend, server-side backend APIs ans smartwatch integration.
- Reduced the preprocessing workload by 98.6% from 3 days to 5 minutes for the Osteoarthritis research.
  * Developed an AI-based detection and image cropping system by training a deep learning model.

Software Engineer, Colatour Travel Service Co., Ltd   Jan. 2018 – Mar. 2020

Lead iOS Developer, Swift, C#, .NET, Git, MVP   Taipei, Taiwan

- Led a team of 3 engineers to develop a B2C e-commerce mobile app with 100+ pages and 146,497 downloads.
- Developed a mobile communication app for 1,191 colleagues.
- Involved in the full software development lifecycle, from planning and design to development to the App Store, testing, user analysis, maintenance, feature addition.

Freelance Developer   Project-Based

Python, Microsoft SQL Server, PySimpleGUI / Ruby, Jekyll, HTML

- Developed the AI-based research scoring desktop platform for Industrial Technology Research Institute (ITRI).
- Developed the company profile website for TwinAI.

PROJECTS

Mobile App, Frontend, Backend, Swift, Python, Flask, Git

Speech Emotion Recognition iOS App: Real-Time Audio Analysis with Flask Backend for Data Processing

Mobile App, Game, Frontend, Backend, C#, Python, MySQL

Virtual Reality Game Android App: Escape Room Adventure Game

Website App, Game, Frontend, Backend, Java, JavaScript, HTML/CSS, MySQL

Online Game for Pet Adoption, Training, and PvP Battles

Portfolio: youtube.com/@WanXuanZhu (Additional projects included)

PUBLICATIONS

Co-Author, "Successful Real-World Application of an Osteoarthritis Classification Deep-Learning Model Using 9,210 Knees—An Orthopedic Surgeon's View", J. Orthop. Res., 2022

Co-Author, "Training a Deep Contextualized Language Model for International Classification of Diseases, 10th Revision Classification via Federated Learning: Model Development and Validation Study", JMIR Med Inform, 2022

SKILLS

Languages: C++, Python, Java, Swift, Ruby, C#

Tools and Libraries: Git, SourceTree, Slack, Flask, MySQL, Postman, Firebase(for Crashlytics, Notifications, and Distribution), Google Analytics, Jenkins