Tomy (Chi-Wei) Hsieh

Computer Science Graduate with NLP experience and enthusiasm for user-centric design

Education

National Chung Hsing University (NCHU)

Bachelor of Science in Computer Science

Taichung, TW

- Related Courses: Algorithms, Introduction to Information retrieval, Introduction to Data Mining and Machine Learning, Artificial Intelligent Internet of Things

- School representative for exchange to ECE Paris in Spring 2022 Semester

Yuan-Ze University (YZU)

Sep. 2017 - Aug. 2019

Jul. 2021 - Dec. 2021

Sep. 2019 - Jun. 2022

Completed Freshman & Sophomore Year Coursework

Majored in Computer Science

- Related Courses: Computer Programming, Web Programming, Discrete Mathematics, Data Structures, Linear Algebra

- School representative of Soochow University delegation member in 2018

Work Experience

Software Engineer Internship

Intel Corporation, Client Computing Group, Chrome Team

Taipei, TW

Taoyuan, TW

- The Debug Agile System

- Developed and maintained the Diango Full-stack website for test report visualization

- Machine Learning Engineering for Canary Project

- Studied and trained time series ML models for different test cases with sktime

- Regularized and optimized the data pipeline to improve model accuracy

- Deployed ML models on a unified platform as RESTful API with FastAPI

Research Experience

Natural Language Processing Lab, NCHU

Research Assistant

Jul. 2020 - Dec. 2021

Taichung, TW

Advisor: Yao-Chung Fan

- Independent Research

- Focused on specific use cases and characteristics of the summarization task
- Experimented with different training methodologies and practices
- Capstone Project: Question Generation Quality Enhancement based on BART
- Honorable Mention of Departmental Capstone Project Contest among 40+ contestants
- System Development
 - Designed and maintained a secure, scalable machine learning experiment runtime environment across 20+ on-premise
 - Created and maintained the NLP Lab API, a unified platform for NLP research and demonstration for the laboratory
 - Developed and maintained a Question Generation Platform, Querator AI, backed by the NLP Lab API

Awards / Honors

- Special Award, 2020 LegalTech Hackathon: Search Algorithm Explore my full skillset in the dedicated Project page for Knowledge Graphed Verdict
- YZU school representative, 2018 ICPC Asia Taipei Regional Contestant
- Rank national top 2% among other 2000+ competitors at the 2018 Collegiate Programming Examination (CPE)
- Diversity sponsored attendee, PyConDE & PyData Berlin 2022

Skills

- Programming Languages
 - C/C++, Java
 - JavaScript, TypeScript, React
 - Python, Flask, PyTorch, PyTorch Lightning, Transformers
- - Docker, Ansible, Terraform
 - AWS, Google Cloud
- Misc
 - Shell/Bash, Git, Makefile
 - GitHub Actions, GitHub Flow, Agile Development

Projects

Explore my projects in the dedicated Project page

Tubee

- Developed an automated personal YouTube management platform
- Filtered favorite videos from 600+ new videos across 250 channels per day
- Built with Flask, PostgreSQL, Celery, Docker

YZU CI Camp Website + Sen-Tree-Pay

- Designed the landing page and registration system for the event
- Developed a point system utilized by 300+ attendees
- Built with Laravel, MySQL

Querator Al

- Created a web system for context-answer-based Question Generation with BERT
- Built with FastAPI, React, Docker

Library Flow

- Implemented crowd statistics visualization and trend prediction based on Bluetooth signal
- Collected people flow data with IoT devices scattered in the library
- Built with Raspberry Pi, FastAPI, PostgreSQL, Heroku

Extracurricular Activities

AHSNCCU Pop Music Club

Sep. 2015 - Jun. 2016

Event General Coordinator

- Led a team of 5 to deliver a joint public presentation with three other clubs, attracting 1000+ audiences

Mar. 2017 - Jul. 2017 NTU Sprout program

Selected Python Programming Trainee

YZU College of Informatics Orientation Camp

Summer 2018

Chief Director of Event Planning

Taoyuan, TW

Feb. 2020

Taipei, TW

Full Stack Engineer

- Conducted an annual event with over 300+ attendees

NCHU Drama Club Sep. 2019 - Jun. 2022

Equipment Manager Taichung, TW

Executive Consultant

- Provided technical support for the annual drama performance for three years

NCHU Public Address and Lightning Training Camp

Selected Trainee Taichung, TW

Apr. 2022

PyCon DE & PyData Berlin 2022

Volunteer of Event Staff / Session Chair Berlin, DE