Tomy (Chi-Wei) Hsieh

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

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Education

National Chung Hsing University (NCHU)   Sep. 2019 - Jun. 2022
Bachelor of Science in Computer Science   *Taichung, TW*

- Grades
  - Overall GPA: 3.24/4.3 (3.24/4.0)
  - Last 60 credits GPA: 3.43/4.3 (3.39/4.0)
  - Major GPA: 3.20/4.3 (3.17/4.0)
- 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
Completed Freshman & Sophomore Year Coursework   *Taoyuan, TW*
Majored in Computer Science

- Grades
  - Overall GPA: 3.49/4.3 (3.44/4.0)
  - Major GPA: 3.47/4.3 (3.43/4.0)
- Related Courses: Computer Programming, Web Programming, Discrete Mathematics, Data Structures, Linear Algebra
- School representative of Soochow University delegation member in 2018

Research Experience

Research Assistant   Jul. 2020 - Dec. 2021
Natural Language Processing Lab, NCHU   *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 servers
  - 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

Work Experience

Software Engineer Internship   Jul. 2021 - Dec. 2021
Intel Corporation, Client Computing Group, Chrome Team   *Taipei, TW*

- The *Debug Agile System*
  - Developed and maintained the Django 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

Awards / Honors

- Special Award, 2020 LegalTech Hackathon: *Search Algorithm 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
  - Shell/Bash
- Python
  - Flask, Django, FastAPI
  - PyTorch, PyTorch Lightning, Transformers
  - Requests, BeautifulSoup, Scrapy

Projects

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

StupidQA

- Developed a multiple-choice open-domain question-answering bot
- Built with Python, PySpark, Wikipedia corpus, TF-IDF

Querator AI

- 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   *Taipei, TW*

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

NTU Sprout program   Mar. 2017 - Jul. 2017

Selected Python Programming Trainee

YZU College of Informatics Orientation Camp   Summer 2018

Chief Director of Event Planning   *Taoyuan, 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   Feb. 2020

Selected Trainee   *Taichung, TW*

PyCon DE & PyData Berlin 2022   Apr. 2022

Volunteer of Event Staff / Session Chair   *Berlin, DE*