Tomy Hsieh

Education

National Chung Hsing University

Sep. 2019 - Current

Bachelor of Computer Science, Expected Jun. 2022; Transfer Student

Taichung, TW

- Major GPA: 3.21/4.0
- Winning 2nd place among 10+ teams on the final contest of Information Retrieval on implementing an Open-domain Question Answering bot
- Graded 1st place among 10+ teams on final project of predicting hotel booking demand using various regression and classifying analysis
- Achieved overall 3rd place out of 90 on 8 coding assignments of Algorithm
- Graded 100% perfect for optional assignment of implementing a simple FTP server from scratch with C in the course of File Processing
- Nominated for foreign exchange student to ECE Paris in Spring 2022 Semester

Yuan-Ze University Sep. 2017 - Jan. 2019

Completed Freshman & Sophomore Year Coursework

Taoyuan, TW

- Major GPA: 3.44/4.0
- Rank top 2% among other 2000+ competitors at winter round of Collegiate Programming Examination (CPE) in 2018
- Achieved overall 1st place out of 40 on coding exam of Data Structure
- Selected as representative team member of ICPC Asia Taipei Regional Contest in 2018
- Selected as delegation of College of Informatics to visit Soochow University in 2018

Experiences

Software Engineer Internship

Jul. 2021 - Current

Intel Corporation, Client Computing Group, Chrome Team

Taipei, TW

- Debug Agile System
 - Developing and maintaining the Django Full-stack website for test report visualization
 - Improve the code maintainability by upgrading major version of Python and Django
 - Database normalization and migration from SQLite to MySQL
 - Integrate with JIRA issue tracker for automate alarm and report
 - Major UI redesign and rewrite, which receive over 85% of user satisfaction rate
 - Componentlize the core module for system extensibility to different department
- Machine Learning Engineering for Canary Project
 - Deploy the time series classification system as RESTful API with FastAPI

Research Assistant Jul. 2020 - Current

Natural Language Processing Lab, NCHU (Previously Ubiquitous Data & Intelligent Computing Lab)

Taichung, TW

- Conducting my independent research: Complex Question Generation Based on BART
- Designing and maintaining a secure, scalable ML experiment runtime environment across 15+ on premise server
- Minimize lab website size and boost loading performance over 90% by optimizing webpack config and improve deployment
- Leading a team on developing and engineering the Question Generation Platform, Querator Al

Leadership, Student Group

- As Event General Coordinator of Pop Music Club, leading a team of 5 conducting a joint public presentation with 3 other clubs, attract estimated over 1000+ of audience (2016)
- As both Chief Director of event planning and full-stack engineer, conducting the annual College of Informatics Orientation Camp with over 300+ attendances (2018)
- Equipment section, and executive consultant of Drama Club (2020)

Languages, Certificates, Awards, Bug Reports

- Chinese (Native)
- English (ETS TOEFL: 88, 2020)
- Google Fundamentals of Digital Marketing (2018)
- Coursera Introduction to Cloud Identity (2020)
- Coursera Google Cloud Platform Big Data and Machine Learning Fundamentals (2021)
- Coursera Modernizing Data Lakes and Data Warehouses with GCP (2021)
- Special Award, 2020 LegalTech Hackathon: Search Algorithm for Knowledge Graphed Verdict
- Honorable Mention among 40+ contestants, 2021 Departmental Information Project Contest: Question Generation Quality Enhancement based on BART
- HITCON ZeroDay

Programming languages, skill, and stacks

- Main focus: Python (Expert)
 - Web Scraping: Requests, BeautifulSoup, Scrapy
 - Backend Programming: Flask, Django, FastAPI
 - Machine Learning: PyTorch, PyTorch Lightning
 - Natural Language Processing: HuggingFace Transformers
- Proficient level
 - Data structure, Algorithm: C, C++, Java
 - Frontend Programming: ES6 JavaScript, jQuery, React
 - Automation, Scripting: Shell/Bash
 - Unix system operation: Ubuntu, Debian
- Novice level
 - Frontend Programming: Vue
 - Backend Programming: PHP (Laravel), Go
 - iOS App: Swift

Toolchains

- Development: Git, Git Flow, CI, Agile Development
- Cloud Computing Platform: Google Cloud, AWS
- PaaS: Heroku, Vercel, Netlify
- Web Server: Apache, Nginx
- Database & Memcache: MySQL, Postgres, MongoDB, Redis, RabbitMQ
- Distributed Computing: Hadoop, Spark
- Virtualization: Docker

Projects

- Cafe Crawler: Use Python to crawl coffee chains address and export .kml for Google My Maps (2016)
- YZU Portal SDK: Python module for accessing Yuan-Ze University Student Portal System (2017)
- Monopoly: Monopoly game written in pure JavaScript (2017)
- Hello Tainan: Database-less web application to query bus route with in-time arrival information (2018)
- <u>YZU CI Camp Website</u> + <u>Sen-Tree-Pay</u>: Camp website and point system built with Laravel and hosted on Google Cloud Platform (2018)
- Tubee: A YouTube channel subscribing tool build with Flask, PostgreSQL, Celery (2018~)
- Coinc: Fiat and crypto currency conversion workflow for Alfred (2019)
- StupidQA: Entry-level multiple choice QA bot with Wikipedia corpus and TF-IDF (2020)
- Querator AI: Web client for context-answer-based Question Generation with BERT (2020~)
- Simple FTP: Simple implementation of FTP Server-Client (2020)
- <u>Library Flow</u>: Crowd visualization and trend prediction based on bluetooth signal (2021)

Hackathon, Conference, and Training Program

- Selected trainee of NTU Sprout program on Python Programming (2017)
- Attendee of 2018 XR Hack Fest
- Attendee of PyCon Taiwan (2018, 2020)
- Attendee of Mobile Open Platform Conference (2018, 2020)
- Attendee of Students' Information Technology Conference (2020, 2021)
- Attendee of Conference for Open Source Coders, Users and Promoters (2020)
- Attendee of Hacks In Taiwan Conference (2020)
- Selected trainee of Advanced Information Security Summer School (AIS3) (2020)