SHU-HAO WU

https://portfolio-ken1009us.vercel.app
https://github.com/ken1009us
https://www.linkedin.com/in/shwu02

Champaign, IL
Mobile: (+1) 217-904-9351
E-mail: shwu2@illinois.edu

WORK EXPERIENCE

Software Engineering Intern

PhysIQ (*Python, JavaScript, Node.js, Kotlin, YAML, GitLab, Shell Script, Kubernetes*). May 2022 – present
- Enhanced compatibility and efficiency by 20%: Programmed **Python** noxfile to replace makefile for utilizing varying nox sessions for building environment
- Reduced CI runtime by 25%: Programmed **YAML** to combine nox with **CI** jobs for improving shell-based testing
- Streamlined data querying: Built **Python** functions for **JSON** pipeline & produced test files for output checks
- Resolved validation issues: Programmed **Kotlin** function to create test function in **rest-api** repository
- Boosted productivity: Developed a responsive **Slack bot** using **JavaScript** and **Node.js** for instant employee support

Backend Engineering Intern

Ponddy Education Inc. (*Python, TensorFlow, SQL, Django*) July 2020 – March 2021
- Upgraded data processor: Migrated **SQL**-based to **Django**'s ORM module for better performance
- Improved audio model: Programmed **Python** function to crawl 20,000 mp3 files for text-to-speech processing
- Streamlined news collection: Developed **web crawler** to gather articles across categories
- Advanced AI training: Operated **deep learning** model to teach 15 article categories interpretation and identification

TECHNICAL SKILLS

Languages & Frameworks: Python, SQL, Kotlin, Java, Django, Flask, HTML, CSS, JavaScript, React, Express
Tools & Databases: Git, MySQL, SQLite, MongoDB, Neo4j, GCP, Linux, Docker

EDUCATION & SCHOLARSHIP

University of Illinois at Urbana Champaign (UIUC), IL August 2021 – present
Master of Science in Information Management
    Coursework: Database Systems; Information Modeling; Data, Statistical Models, and Information;
        Computer Network; Foundations of Information Processing; Programming for Analytics & Data Processing
Chung Cheng Scholarship, Chung Cheng Scholarship Foundation: US$260 March 2018

PROJECT

Group Buy (Skills: **ER Diagram**, **Relational Schema**, **SQL**, **GCP**) May 2022
- Led team to customize **ER diagram** and improve communication for user satisfaction to **design database**
- Constructed database on **GCP** with **MySQL** and collaborated to build 6 tables, including USER, POST, CATEGORY, GROUP, LEADER, PAYMENT to resolve shopping issue
- Bolstered database integrity by adopting **transaction** and **trigger** to prevent breakdowns, duplicates, and invalid data

Newsflow, HackIllinois (Skills: **Python**, **Dash**, **JSON**, **API**) February 2022
- Utilized **Python Dash framework** to create dynamic **web app**s integrating **News API** and **Twitter API**
- Facilitated user engagement by implementing trending news display and **search functionality** for specific articles and countries

Hotel Reservation Application (Skills: **Java**, **OOP**) January 2022
- Implemented **Object-Oriented Programming** in **Java**, creating robust class designs for efficient code
- Designed a room availability system, enabling users to effortlessly locate and book hotel rooms

Meteorite visualization (Skills: **Python**, **Numpy**, **JavaScript**, **HTML**, **Jupyter Notebook**) December 2021
- Guided team to create 13 meteorite-landing **visualizations**, conveying landing patterns and trends
- Analyzed data using **Pandas** and **Matplotlib**, creating deployable **JavaScript** and **HTML** code via **GitHub**

Draw something (Skills: **Python**, **Flask**, **HTML**, **CSS**,) July 2021
- Launched a website with **Python Flask** framework and **HTML**, offering users an artistic outlet
- Established a **registration system** enabling seamless user authentication and password changes

CERTIFICATES

CS50's Introduction to Computer Science (Harvard University online course - edX) June 2021
Python Data Structures (Coursera) April 2020

EXTRACURRICULAR ACTIVITIES

Attendee, **HackIllinois 2022**, UIUC, IL February 2022 – March 2022