

# Kai-Chih (KC) Huang

☎ 979-344-1277 | ✉ kc.huang@tamu.edu | 🗣 kaichh | 🌐 in/kaichihhuang

## EXPERIENCE

---

**Brilltek** Taichung, Taiwan (Remote)  
*Software Engineer Intern (Backend Engineer)* June 2023 – Aug. 2023

- Developed 6 production report APIs for the company's flagship Manufacturing Execution System (MES)
- Refactored the shift management API, reducing codebase by **43%** and improving query speed by **20%**
- Introduced an **Nest.js** platform to integrate internationalization (i18n) across all company projects, enabling external translators to translate directly on the web interface without accessing project code
- Automate data synchronization between the i18n platform and project repos using **GitLab-CI** and **Bash** scripts
- Fixed 5+ ad-hoc issues and bugs

**Nielsen IQ (formerly Nielsen)** Shanghai, China  
*Analyst* Apr. 2019 – Mar. 2020

- Created and managed project timeline, headed desk research before project kick-off; monitored data collection quality during fieldwork; conducted data analysis and delivered final report
- Participated in 10+ projects including product pre-launch test, customer segmentation, and market entry research

## SELECTED PROJECTS

---

### Splitwise Clone

- Developed a **fullstack** bill-splitting and expense-tracking app utilizing **React**, **Express.js**, and **PostgreSQL**
- Designed a normalized database schema following Boyce-Codd Normal Form (BCNF) principles

### Simple Operating System

- Built a **Unix-based operating system** with **C++** from the ground up running on an Intel x86 processor
- Architected a demand-paging virtual memory management system, with two-level paging and page fault handling
- Implemented a file system, disk driver, and kernel-level thread scheduling system

### YouTube Downloader

- Created a desktop application capable of downloading YouTube videos, with the flexibility to be compiled for multiple operating systems via **Electron** framework

### Banking Portal

- Developed **RESTful API** and implemented **MVC** architectural pattern with **Java Spring Boot** and **MySQL**
- Packaged and run the service on **Docker** container

## EDUCATION

---

**Texas A&M University** College Station, TX  
*Master of Computer Science, GPA: 3.8/4.0* Aug. 2022 – Present

- Coursework: Analysis of Algorithms, Operating Systems, Database Systems, Software Engineering, Network Security

**National Taiwan University** Taipei, Taiwan  
*Bachelor of Business Administration, major in Finance, GPA: 3.6/4.3* Sep. 2014 – June 2018

- Exchange Student Program: National University of Singapore, Shanghai Jiao Tong University

## SKILLS

---

**Programming Languages:** JavaScript, Java, Python, C++, Bash

**Frameworks/Libraries:** Express.js, Nest.js, Spring Boot, React

**Data/Tools:** MySQL, MongoDB, Docker, GitLab-CI, Git, Linux