

I-HSUAN HUANG

Software Development Engineer

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ethanhuang-wisc

Nesconset, NY

EDUCATION

Master of Science in Computer Engineering

Stony Brook University, New York

Aug. 2021 – Ongoing

Stony Brook, NY

Professional Capstone Certificate in Computer Sciences

University of Wisconsin - Madison

Jan. 2019 – Dec. 2020

Madison, WI

GPA - 3.2/4.0

B.B.A. in Medical Informatics

Chung Shan Medical University

Sept. 2003 - Jan. 2008

Taichung, TW

Class Ranking : 2/27

EXPERIENCE

Co-founder & Software Engineer

Tuileries International Ltd.

Nov. 2014 - Aug. 2021

Taipei, TW

- Built the THÉS e-commerce business from nothing in 2016 to about \$5 million TWD in revenue in 2019.
- Grew from zero to 1,000 monthly active users, with almost 30,000 monthly page views since the end of 2018.
- Led a two-person IT team to customize maintainable, scalable, and deployable solutions for internal business processes in the private cloud system.
- Launched a feature in the store's administrative web portal to view and model data virtually.

Software Developer

PCPartner Group Ltd.

Aug. 2012 - Mar. 2014

Taipei, TW

- Worked with staff software engineer Wei Feng Lin and senior software engineer Li Chiang Yu on several Android-related projects, mainly development of a DLNA player app for the ZOTAC TV Box.
- Designed an algorithm to implement a 3D gallery slideshow app in the ZOTAC TV Box.
- Designed an application for Debian-based Linux devices capable of playing media via an Android DLNA app.

Software R&D Engineer

ASUSTeK Computer Inc.

Jul. 2011 - Jul. 2012

Taipei, TW

- Worked with senior software engineer Chin Hsun Hou to develop an automatic Android process PostgreSQL server on the Ubuntu operating system that automatically builds source code into image files.
- Implemented a centralized automation-build server for bootable Android IMG files, available for all software engineers at the ASUS R&D Android team.
- Launched a web application that could create an Android system code collaboration with a visualization of the build result, similar to Jenkins.
- Assisted in debugging Android OS & Android apps corresponding with the current API on Asus Transformer series phones and tablets.

Web Developer

Viking Family International Ltd.

📅 Jun. 2009 - Jun. 2011

Taipei, TW

- Redesigned this website's front page, product pages, and member login page as its front end.
- Improved this website's efficiency by optimization Apache web server, and developed the web site based on the CodeIgniter framework's MVC model.
- Lunched an official website for TWG TEA Taiwan.

TEACHING

Grader and Teaching Assistant

Stony Brook University, New York

📅 Aug. 2021 - Ongoing

Stony Brook, NY

- Worked as a grader and TA under Prof. Muralidhara Subbarao for ESE358 Computer Vision, grading and holding office hours to help students in areas of linear algebra and coding.

PROJECTS

Adding MIN/OPT to the Page Replacement Algorithm Simulator@UW-Madison

📅 Fall 2020

- Developed and implemented an optimal algorithm in a page replacement algorithm simulator.

C Operating System Computer Architectures

Page Replacement Algorithm Simulator@UW-Madison

📅 Fall 2020

- This project realized a simulator for experimenting with page replacement algorithms, which are FIFO, LRU, Clock, and Second-chance FIFO.
- Implemented four page replacement algorithms into the TLB page table as the simulator.

C Operating System Computer Architectures

Synchronizing with Threads and Shared Memory@UW-Madison

📅 Fall 2020

- This project was implemented using synchronized threads.
- The features of the program: 1. Reads lines from stdin, processes and outputs the result to stdout. 2. The different threads are synchronized using semaphores. 3. The Queue structures have fields for statistics to track enqueue, dequeue, and respective blocking counts.

C Operating System

THÉS Online Shop@Tuileries International Ltd.

📅 May 2015 - Present

🔗 thes.com.tw

- Improved website efficiency by extending NGINX http-server with custom code.
- Created a web application using PHP as back-end for the web portal usually only accessible by staff, such as those used by various e-commerce platforms, for instance, Shopify.
- Built web store from scratch with PHP, MVC framework, Bootstrap CSS framework, and Symfony PHP framework.
- Improved website efficiency by optimizing SQL statements.

PHP JavaScript CSS HTML SQL Operating System Software Engineering Human-Computer Interaction

AirFun - DLNA Player for Android@PCPartner Group Ltd.

📅 2012-2013

🔗 AirFun - DLNA APP@ZOTAC TV Box

🔗 PRESS RELEASE

- This app could stream music, video, and pictures to an Android device from a PC or other DLNA certified devices. It could also access media from different devices based on media server functionality.
- Used Android 4.3 Jelly Bean (API 18), customized UPnP/DLNA library to develop this Android app for Android-based ZOTAC TV BOX products.

Java

Computer Networking

Internet of Things(IoT)

Human-Computer Interaction

Android OS Automation System@ASUSTek

📅 2011

- Built an automated Android Image file system which could report to a software engineer regarding the success or failure of the image building process in the Ubuntu operating system using Linux Shell, PostgreSQL, and Git.
- Launched a web application and integrated it into our existing automation system, enabling other software developers to build reliably, test, and deploy their software in a more visualized manner using a web interface.

Python

BASH

Systems and Networking

Human-Computer Interaction

FIELD OF INTEREST

Systems and Networking

Internet of Things(IoT)

Operating System

Computer Architectures

Software Engineering

Human-Computer Interaction

PROGRAMMING SKILLS

C

C++

Python

PHP

Java

HTML

CSS

JavaScript

SQL

BASH