## **CHIH-YANG HUANG**

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### **WORK EXPERIENCE**

## **NOVATEK MICROELECTRONICS CORP.** | SENIOR ENGINEER AT CAD, DESIGN ENGINEERING SERVICE Hsinchu, Taiwan | Apr. 2021 - Now

- I am the first few employees joining the Design Platform (DP) sub-department and lead the development direction of this department.
- To replace the old-fashioned PM approach, such as MS Excel editing, we **build the design platform to manipulate** and analyze the data.
- We centralize **data storage** from file system to PostgreSQL in order to implement data analysis and visualization.
- We create some machine learning models to predict the computing resources allocation.

## NATIONAL TAIWAN UNIVERSITY | RESEARCH ASSISTANT AT RESEARCH CENTER FOR DIGITAL HUMANITIES Taipei, Taiwan | Feb. 2019 - Jul. 2019

• I was an IT engineer and I used **HTML**, **CSS**, **JavaScript**, **PHP**, **MySQL** and **Sphinx Search Engine** to build and maintain several websites.

## **EDUCATION & TRAINING**

#### **National Taiwan University**

Taipei, Taiwan | 2019 - 2021

M.S. IN AI, COMPUTER SCIENCE AND INFORMATION ENGINEERING (GPA 4.0/4.3)

Coursework: Advanced Artificial Intelligence; Natural Language Processing; Introduction to Digital Speech Processing

#### Institute of Statistical Science. Academia Sinica

Taipei, Taiwan | 2017

SUMMER SCHOOL STUDENT

Coursework: Financial Statistics; Industrial Statistics

#### **University of Malaya**

Kuala Lumpur, Malaysia | 2016 - 2017

**EXCHANGE PROGRAM** 

Coursework: Computer Network; Digital System Design

## University of Taipei

Taipei, Taiwan | 2015 - 2019

B.S. IN COMPUTER SCIENCE (94.84/100) Coursework: Data Structures; Algorithms

## **MASTER THESIS**

- Title: Company Failure Risk Assessment Based on the Court's Judgments
- Methods: Use **bi-LSTM**, **word embedding**, **SVM and logistic regression** to build several models. Establish web pages to **visualize** the results.
- Technical Skills: Python, PyTorch, HTML, CSS, JavaScript, PHP, MySQL

## **COMMUNITY PROJECTS**

## INKROSETTA, TOP 20 TEAM IN THE 2022 TAIWAN PRESIDENTIAL HACKATHON [7]

EXECUTIVE YUAN, TAIWAN | SEP. 2022

We figured out the Uniform News Platform for Government, which is adopted by gov partly.

# E.SUN AI OPEN COMPETITION WINTER 2021-CREDIT CARD TRANSACTION CATEGORY RECOMMENDATION (13 / 859) ☑

E.SUN COMMERCIAL BANK, TAIPEI | FEB. 2022

LSTM, Neural Network Model

## **JOURNAL PAPERS**

**Exact and Heuristic Algorithms for Some Spatial-aware Interest Group Query Problems** 

Journal of

#### CHIH-YANG HUANG, PO-CHUAN CHIEN, YEN HUNG CHEN

This paper designs an exact algorithm on a **measure-&-conquer-based** method to precisely solve the **NP-Complete** problem, and a performance analysis is given.

## SYSTEM PROJECTS WITH DOI

### 淡新檔案客家研究數位分析系統 (DASH) [2]

HTML, CSS, JavaScript, PHP, MySQL, Sphinx Search Engine

- We collected the archives and labeled the persons, locations, objects, as well as Hakka elements to do more analysis.
- We built DASH that allows users to do **full-text query**, observe and interact with the **contexts** provided by the system.

#### THDL GIS 古契書歷史地理資訊系統 🖸

RCDH, NTU | Aug. 2019

RCDH, NTU | Apr. 2020

HTML, CSS, JavaScript, PHP, MySQL

- This tool allows users to observe the **geographic location** and distribution of land deeds in the part of THDL.
- A **novel** method allows users to **draw a polygon** to retrieve all the land deeds.
- A timeline feature for refining the query result set according to time is included.

#### REFERENCES

- Prof. Jieh Hsiang
  - Distinguished Professor
  - Department of Computer Science and Information Engineering, National Taiwan University
  - jhsiang@ntu.edu.tw
- Prof. Yen Hung Chen
  - Professor
  - Department of Computer Science, University of Taipei
  - yhchen@utaipei.edu.tw
- Ms. Winnie Chang
  - Software Engineer
  - Novatek Microelectronics Corp.
  - Winnie Chang@novatek.com.tw

#### SKILLS

Languages: Java, Python, PHP, Bash, SQL

Web Development: Java Spring Boot, Vue3, JavaScript, HTML/CSS

Technology: Git, LATEX, PostgreSQL, GIS