

# 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.
- Build the design platform to manipulate and analyze the data, such as **PM, HR planning and CAD tools**.
- **Python3** to parse data from **CAD tools (ICC2, INVS)** and connect with **PostgreSQL**
- **Webix, Quasar, PrimeVue and Vue3** to build front-end website
- **Mocha and Jest** to do front-end website unit tests
- **Java Spring Boot** to build back-end business models and algorithms
- **JUnit** to do back-end website unit tests

**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** 

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

## CONFERENCE PROCEEDINGS

### An HGIS Platform of Taiwanese Land Deeds

JIEH HSIANG, CHIH-YANG HUANG

PNC 2019 | Nanyang Technological University, Singapore

### An user-oriented HGIS platform on Taiwanese Land Deeds

CHIH-YANG HUANG, NUNG-YAO LIN, CHUNG-HSIANG OU

JADH 2019 | Kansai University, Osaka, Japan

## JOURNAL PAPERS

### DocuWidgets: Enhanced Toolkits for DocuSky

Journal of Digital Archives and Digital Humanities, (9), 1-13, 2022 | NTU, Taipei

CHIH-YANG HUANG, JIEH HSIANG, HSIEH-CHANG TU

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

Journal of

Internet Technology, vol. 21, no. 4, pp. 1199-1205, Jul. 2020 | NTU, Taipei

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)

RCDH, NTU | APR. 2020

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

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@utaippei.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