

SUMMARY

Born and raised in Malaysia before my undergraduate studies, I graduated with a double degree in Electrical Engineering and Economics from National Taiwan University. I have developed a strong academic foundation and practical experience in various fields, including recommendation systems, language processing, data mining and social sciences. Keen on exploring research opportunities in social computing and human-centered NLP, with a focus on combining NLP and data mining techniques with social science theories and heuristics to better understand human behavior and interaction.

EDUCATION

NATIONAL TAIWAN UNIVERSITY (NTU) *GPA: 3.99/4.30 (88.83%), or scaled to 3.83/4.00 | Sept 2019 - Jun 2024 | Taipei*
B.S. IN ELECTRICAL ENGINEERING, COLLEGE OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE
B.A. IN ECONOMICS, COLLEGE OF SOCIAL SCIENCES

EXPERIENCES

ARISE LAB, CHINESE UNIVERSITY OF HONG KONG (CUHK) *Sept 2024 - Dec 2024 | Hong Kong (Remote)*
REMOTE RESEARCHER INTERN (UNDER THE MENTORSHIP OF [DR. YINTONG HUO](#))

- Evaluate LLM-powered code intelligence by investigating LLMs' security aspects of vulnerable code generation.

IDSSP LAB (INTERDISCIPLINARY DATA SCIENCE AND SIGNAL PROCESSING LAB), NTU *Feb 2021 - Jun 2024 | Taipei*

UNDERGRADUATE RESEARCHER (UNDER THE SUPERVISION OF [PROF. CHE LIN](#))

- Studied and worked on a temporal and contextual trend-aware transformer-based push notification recommendation system (Push4Rec, ICASSP'24) that allows news platforms to disseminate articles to users through push notification services (PNS) (a collaborative work with partnering company [AviviD](#)).

INSTITUTE OF INFORMATION SCIENCE, ACADEMIA SINICA *Jul 2022 - Sept 2023 | Taipei*

RESEARCHER INTERN AND PART-TIME RESEARCH ASSISTANT (UNDER THE SUPERVISION OF [PROF. DE-NIAN YANG](#))

- Worked on a user recommendation problem (AFTER, ICDE'24) in the case of extended reality (XR) spatio-temporal social network that aims to maximize overall user preference utility and visibility based on dynamic users' trajectories.
- Worked on research and implementations of diffusion model applied on conditional social network generation (CDGraph).

SKILLS

PROGRAMMING LANGUAGES *Experienced:* Python *Familiar:* R | C/C++ | MATLAB

LANGUAGES *Native (Bilingual):* Chinese | English *Fluent:* Cantonese | Malay *Beginner:* French

SELECTED PROJECTS

PROGRESSIVE KNOWLEDGE DISTILLATION FOR SPEECH SEMI-SUPERVISED LEARNING (SSL) MODELS *Jan 2023*

RESEARCH PROJECT FOR THE COURSE 'DEEP LEARNING FOR HUMAN LANGUAGE PROCESSING' INSTRUCTED BY HUNG-YI LEE (COMME5054)

- Investigated the effectiveness of performing knowledge distillation by progressively distilling the forefront hidden layers in speech SSL models to a truncated student model on the evaluation performance in SUPERB benchmark tasks.

ELECTORAL SENTIMENT ANALYSIS ON 2022 TAIWANESE LOCAL ELECTION *Jan 2023*

FINAL PROJECT FOR THE COURSE 'DATA SCIENCE AND SOCIAL INQUIRY' INSTRUCTED BY MING-JEN LIN AND YU-CHANG CHEN (ECON5166)

- Performed BERT-based sentiment analysis on Tweets related to the 2022 Taiwanese Local Election pre and post-election.
- Analyzed the cause of sentiment shift before and after the election with respect to netizens' ideologies, local and overall election results via a difference-in-difference-in-difference analysis.

TRANSITIONING FROM OPEN-DOMAIN DIALOGUES TO TASK-ORIENTED DIALOGUES *Jun 2022*

FINAL PROJECT FOR THE COURSE 'APPLIED DEEP LEARNING' INSTRUCTED BY YUN-NUNG CHEN (CSIE5431)

- Designed an automated conversational agent to attentively detect potential intents in utterances and perform gradual transitions to fulfill the task of interest such as closing a sale within the conversation by tackling the trade-off in conversational naturalness, relevance and aggressiveness (ranked 6/40 overall in peer manual evaluation).

TEACHING ASSISTANCE

- Linear Algebra (2023 Fall, instructed by [Hung-yi Lee](#)), NTU.

ACADEMIC PARTICIPATION

- Machine Learning Summer School ([MLSS2021](#)), Taipei, Taiwan.
- A Brief Discussion on Brownian Motion and Related Processes with Applications ([NCTS2023](#)), Taipei, Taiwan.

RELATED COURSEWORK/MODULES

PROGRAMMING/CS	Computer Programming (with Lab) Algorithms Data Structures Computer Architecture
MATH/STATS/SP	Calculus (1-year) Differential Equations Linear Algebra Discrete Mathematics Game Theory* Statistics and Econometrics (1-year)* Probability and Statistics Signals and Systems
ML/DL/DS/AI	Machine Learning* Applied Deep Learning* Deep Learning for Human Language Processing* Data Science and Social Inquiry** Application of Big Data System*
ECONOMICS	Principles of Economics (1-year)* Microeconomics (1-year)* Macroeconomics (1-year)*
FINANCE	Investment Theory* Financial Market and Derivatives** Corporate Finance* International Finance* Financial Engineering** Predicting Financial Crises** Futures and Options*
FINTECH	Introduction to FinTech* Introduction to Decentralized Finance* Blockchain and Big Data*

AWARDS/HONORS

- NTUEE 1960 Alumni Scholarship, NTU, 2020-2022 (3 consecutive academic years).
- NTU Hope Bursary, NTU, 2020-2022 (3 consecutive academic years).
- Overseas Student Outstanding Academic Performance Award (Class of 2023), Overseas Community Affairs Council (OCAC).

EXTRA-CURRICULAR ACTIVITIES

NATIONAL TAIWAN UNIVERSITY MALAYSIAN STUDENT ASSOCIATION (NTUMSA)

Sep 2019 – Sep 2021 | Taipei

SOCIAL MEDIA AND INFORMATION COMMITTEE

- Managed social media platforms for the Association via content creation and inquiry responses.
- Disseminated information from school authorities to members via social platform posts.

MENTORSHIPS

- Chang Shi Ying (INTI International University undergraduate), working on researching LLM-powered code intelligence, 2024.
- Wong Jia Hui and Chua Tan Li Ming (Foon Yew High School JB student), advising on high school AI competition, 2024.

PUBLICATIONS AND MANUSCRIPTS

- [ICDE'24] Bing-Jyue Chen, **Chiok Yew Ho**, De-Nian Yang. 2024. "AFTER: Adaptive Friend Discovery for Temporal-spatial and Social-aware XR," in 2024 IEEE International Conference on Data Engineering (ICDE).
- [ICASSP'24] Chu-Chun Yu, Ming-Yi Hong, **Chiok-Yew Ho**, Che Lin. 2024. "PUSH4REC: TEMPORAL AND CONTEXTUAL TREND-AWARE TRANSFORMER PUSH NOTIFICATION RECOMMENDER," in 2024 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP).
- [arXiv:2311.01729] Jui-Yi Tsai, Ya-Wen Teng, **Ho Chiok Yew**, De-Nian Yang, Lydia Y. Chen. 2024. "CDGraph: Dual Conditional Social Graph Synthesizing via Diffusion Model," available as *arXiv* preprint.