

YUEH-CHE (ASTON) LEE

☎ (+886)981-961-510 ✉ contact@astonlee.co [in linkedin.com/in/astonlee](https://www.linkedin.com/in/astonlee) github.com/Aston-Lee

EDUCATION

National Central University

B.S. in Computer Science & Information Engineering

- Overall GPA: 3.66/4.0
- Last 60 credits GPA: 3.78/4.0

Sep. 2017 – May 2021

📍 Taoyuan, Taiwan

EXPERIENCE

NCU – Wireless Network and Multimedia Lab.

Research Assistant

- Researching Hierarchical Multi-Label text Classification(HMTC) problem.
- Implement BERT to modify the Hierarchical Attention-based Recurrent Neural Network(HARNN) architecture.
- Built a multi-label text classifier using HARNN model architecture that classify nearly 200 labels with decent accuracy.

📍 Taoyuan, Taiwan

Sep. 2021 – Current

Porsche

Freelance Partner

- Codeveloped front end of Porsche Hsinchu's website.
- Provided photography service for ceremonies / new car arrivals / events.
- Showcased different car interiors, exteriors, and individual options in creative ways.

📍 Hsinchu, Taiwan

Dec. 2020 – Current

Independent Researcher

Collaborator with Dr. Hung-Hsuan Chen & Data Analytics Research Team

- Improving rare words problem in Word2Vec SkipGram by proposing alternative regularization value to the loss function.
- Improved Word2Vec Skip-gram model performance in rare words problem, nearly no additional computation cost.

📍 NCU, Taoyuan, Taiwan

Sep. 2020 – Jun. 2021

LUDO Ltd.: Taiwan Innovation and Entrepreneurship Center

AI Research Engineer Intern

- Proposed idea to let edge devices process images first and send back only the core data for use in further computing.
- Redesigned the yoga model; improved model accuracy by 17% by using the SOTA model (Alphapose).
- Directly contributed to 40% reduction in preprocessing time through new approach.

📍 Taipei, Taiwan

Jun. 2020 – Aug. 2020

Computing Center, College of Hakka studies

Network administrator

- Designed e-newsletter and implemented other required features, such as integrated APIs into fast social sharing buttons.
- Achieved 45% reader growth by analyzing user data and creating new content for a better user experience.

📍 NCU, Taoyuan, Taiwan

Sep. 2019 – Current

Uxorious (Startup Entrepreneur)

Self Employed

- Select decent factory product with great potentials, revalued products with convincing brand image for better profit.
- Gaining traffic from social media, shipping products from manufacturer directly to customer on daily basis
- Increased conversion rate and minimized landing page's bounce rate by optimizing website for mobile shopping
- Reached up to \$400 in daily net profit, \$5,000 in monthly net profit, and up to 3M viewers of a single ad
- Used multiple APIs to track traffic, clicks, and conversion rates for analysis.

📍 Remote

Sep. 2018 – Aug. 2019

R.O.C. Army

Rifleman, Private

- Completed compulsory military service.
- Led installation of Mobile Device Management (MDM) software on Android & IOS for the 3rd Infantry Battalion.

📍 Kansai new training center, Hsinchu, Taiwan

Summer 2017 & 2018

PUBLICATION

Jorunal

- J.-H. Lee, Eric H.-K. Wu, , Y.-Y. Ou, and Y.-C. Lee, "Anti-drugs Chatbot: Chinese Bert-based Cognitive Intent Analysis" submitted to IEEE Transactions on Computational Social Systems, 2021.
- J.-H. Lee, Eric H.-K. Wu, , Y.-Y. Ou, and Y.-C. Lee, "Anti-drug Question Answering Entity-Relation Knowledge Extraction with BERT" submitted to IEEE Transactions on Audio, Speech and Language Processing, 2021.

PROJECTS

Versatile School Database System | SQL

Mar. - Jun. 2021

CE 6039 – Database

- Designed a database system to store university's course data for project use and school contest.
- Implement normalization (1-3NF, BCNF) and de-normalization techniques to improve database performance.
- Implemented object-oriented programming practices such as inheritance to create different types and databases.

Deep Q-Learning game | Javascripts Python Jupyter Notebook

Mar. - May 2021

CE 3065 – Programming in Python

- Implemented Reinforcement Learning and Dueling DQN technique to train an AI agent to play the QWOP game.
- Model achieved perfect balance state and surpassed human performance in the game.

Data Visualization Tools | Python Jupyter Notebook

Nov. - Dec. 2020

- Designed a sample visualization system using Jupyter Notebook.
- Created a Jupyter notebook to illustrate the uses of 10 uncommon graphs for exploratory data analysis.

House Prices - Advanced Regression Techniques | Ames Housing Dataset Python

Apr. - Jun. 2020

CE 6146 – Introduction to Deep Learning

- Led team to train machine learning models with data transformation and feature engineering.
- Integrated different methods, such as Autoregression, LSTM, LightGBM; achieved 96% accuracy.

Mini Lisp Interpreter | Shell Script C Lisp

Oct. - Dec. 2019

CE 3006 – Compiler

- Created Lisp interpreter using Shell script and C to parse the language behavior.

HONORS & AWARDS

Class Representative of CS Department (*elected four consecutive semesters*)

Fall 2019 - Spring 2021

Exchange Student Representative to University of Geneva (*Canceled due to COVID*)

Fall 2020

SKILLS

Languages	Python	SQL	C++ / C	HTML / CSS	JavaScript	Java	Shell Script	LaTeX	
Tools	VS Code	Eclipse	Kaggle	Wireshark	Docker	Anaconda	Git	Scikit-learn	TensorFlow
Platform	Linux	Windows / MacOS	AWS EC2	Google Cloud Platform	Slack	Overleaf	HackMD		
Software	Photoshop	Lightroom/Classic	Premiere Pro	Final Cut Pro					

CERTIFICATE

TOEFL 110 / Reading: 29 / Listening: 28 / Speaking: 27 / Writing: 26

GRE 321 / Q : 168 / V : 153 / AW : 3.0

Kaggle Intro to Machine Learning, Intermediate Machine Learning, Intro to Deep Learning

Coursera Google Data Analytics

LEADERSHIP & EXTRACURRICULAR

Photography Club

Fall 2018 – Spring 2020

Equipment Manager, Vice President

- Managed executive board of 5 members and ran weekly meetings to oversee progress in essential parts of the chapter.
- Fastest growing school club of the 2019-2020 school year
- Planned and hosted large events; received NTD. 50000 in school grants that year, a club record.

Security Research Society

Fall 2020 – Spring 2021

Cadre

- Held opening ceremony for 200+ attendees; improved club members' investing skills.