Chow Siew Yeng

LANGUAGE ENGINEER · COMPUTATIONAL LINGUIST

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Education

Nanyang Technological University   *Singapore*

M.A. (RESEARCH) IN COMPUTATIONAL LINGUISTICS   *Jan. 2020 - Dec. 2021*

- GPA: 5.00/5.00
- LREC 2022 publication: Singlish Where Got Rules One?

Technische Universität Dresden   *Dresden, Germany (online)*

GERMAN SUMMER COURSE   *Jun 2021*

- Scholarship recipient under the German Academic Exchange Services (DAAD).

Nanyang Technological University   *Singapore*

B.A. IN LINGUISTICS AND MULTILINGUAL STUDIES   *Aug. 2015 - Jun. 2019*

- Graduated with Honours (Highest Distinction)
- Minor: Mathematics

Kansai Gaidai   *Osaka, Japan*

ASIAN STUDIES PROGRAM   *Jan. 2017 - Jun. 2017*

- Educated on the appreciation of Japanese art forms and lifestyle.
- Analysed justice systems with focus on America and Japan.

Skills

NLP	NLTK, Regex, Deep Learning models
Programming	Python, React Native, SQL, LaTeX
Version control	Git

Languages

Proficient	Cantonese (speaking), English, Mandarin
Intermediate	German
Basic	Japanese

Experience

Apple   *Singapore*

LANGUAGE ENGINEER   *Mar. 2022 - ongoing*

- Collaborated with global teams to improve Siri's proficiency in Singapore English and localised user experience.
- Worked as a subject matter expert, creating guidelines that drive locale-specific phonetic transcription for ASR, reducing speech recognition error rates in the region.
- Analysed speech model data to identify utterance misrecognitions and engineer data-driven augmentations to the model, raising end-to-end performance.
- Implemented Docker in a bash script to do continuous testing and ensure quality of training dataset used for training new models.

A*STAR (Institute of Higher Performance Computing and Institute of Infocomm Research   *Singapore*

INTERN   *Jan. 2021 - Mar. 2021*

- Trained CNN and MLP models to map facial landmarks to 7 different emotions to enhance online learning in the current context.
- Researched on Discourse Representation Structure and evaluation benchmarks in Natural Language Inference (NLI), offering linguistic expertise to a query answering project.

Nanyang Technological University   *Singapore*

TEACHING ASSISTANT   *Aug. 2020 - Dec. 2020*

- Delivered weekly tutorials on semantics and pragmatics for over 50 undergraduates.
- Strategised lesson flow, guided discussion and promoted understanding of linguistic concepts.

Nanyang Technological University   *Singapore*

RESEARCH ASSISTANT   *Dec. 2017 - Mar. 2021*

- Analysed data consisting mostly of grammatically incorrect sentences to gather data regarding English grammar and improve a treebanking software for parsing texts.
- Supervised adjudication between various pairs of annotators to facilitate inter-annotator agreement and quality of gold data.

Worldwide Opportunities on Organic Farms   *Galway, Ireland*

FARM VOLUNTEER   *Aug 2019*

- Learnt about sustainable agriculture and living.
- Handled daily farm operations including harvesting and planting.

Lions Befrienders   *Singapore*

RESEARCH INTERN   *May. 2018 - Jul 2018*

- Co-developed and executed a health-related project of encouraging 20 socially isolated elderly persons to pursue an active lifestyle.
- Designed, translated, and carried out Mandarin/English questionnaires tracking activity and motivation of the elderly.
- Conducted literature review and research on befriending mechanisms to improve volunteer training.

Extracurricular Activity

NTU Welfare Services Club   *Singapore*

TUTOR   *Sep. 2011 - Apr. 2021*

- Mentored ITE students in mathematics weekly.

NTU GEM Club   *Singapore*

CLUB AMBASSADOR   *Aug. 2016 - May. 2019*

- Welcomed and guided exchange students around Singapore.
- Buddy to a group of 12 exchange students and arranged group outings to foster bonding and help them feel more comfortable away from home.

NTU Hall 1   *Singapore*

MAIN COMMITTEE MEMBER AND INTER-HALL REPRESENTATIVE   *Aug. 2015 - Jan. 2017*

- Represented hall in Inter-Hall Cheer Competition and Inter-Hall Recreational Games.
- Planned and executed an annual 3-day camp for over 50 underprivileged children over 4 months of preparation.

Projects

Nanyang Technological University   *Singapore*

A COMPUTATIONAL GRAMMAR OF SINGLISH USING HPSG   *Jan. 2020 - Dec. 2021*

- Developed a formal grammar of Singlish that can generate syntactic trees and DMRS from input sentences.
- Increased accuracy in parsing Singlish sentences from 46.7% to 70.0%.
- resented findings and international DELPH-IN summits and LREC 2022.

TiMi Studio and Tencent   *International (online)*

GREEN GAME JAM   *Jul. 2021 - Aug 2021*

- Top 16 out of 200 teams globally.
- Created an original game to the theme of environmental conservation.

Defence Science and Technology Agency (DSTA)   *Singapore*

BRAINHACK 2021   *Jun 2021*

- Top 8 of over 40 participating university teams.
- Implemented neural network and used filtered data, optimising model for Computer Vision challenge.

Courses

2022	**Mathematics for Machine Learning Specialization**, Coursera
2022	**Natural Language Processing with Probabilistic Models**, DeepLearning.AI
2022	**Natural Language Processing with Classification and Vector Spaces**, DeepLearning.AI
2021	**11th Lisbon Machine Learning School**, Instituto Superior Técnico