

Chow Siew Yeng

LANGUAGE ENGINEER · COMPUTATIONAL LINGUIST

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Experience

AI Singapore

AI APPRENTICE

Singapore

Aug. 2023 - May 2024

- Completed 2 months of deep-skilling, covering topics such as time-series, NLP, Neural Networks and MLOps.
- Created LLM agents who are able to converse using a Time Weighted Memory Retrieval with 3 other team mates.
- Deployed agents on streamlit and made use of prompt engineering to generate desired output.
- Ongoing: Inverse Text Normalisation project in AGILE framework

Transperfect

LANGUAGE ENGINEER

Singapore

Mar. 2022 - Aug. 2023

- Collaborated with global teams to improve digital assistant'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.
- Utilised Docker to do continuous testing and to ensure quality of training dataset used for training new models.
- Managed a team of data curators, providing guidance and training to ensure accurate and high-quality transcription and data output.

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

INTERN

Singapore

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

TEACHING ASSISTANT

Singapore

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

RESEARCH ASSISTANT

Singapore

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

VOLUNTEER

Galway, Ireland

Aug 2019

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

Lions Befrienders

RESEARCH INTERN

Singapore

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.

Skills

NLP NLTK, Regex, Deep Learning with MLP and CNN

Programming Python, React Native, SQL, LaTeX, Bash

Languages

Proficient Cantonese (speaking), English, Mandarin

Intermediate German

Basic Japanese

Education

Nanyang Technological University

M.A. (RESEARCH) IN COMPUTATIONAL LINGUISTICS

Singapore

Jan. 2020 - Dec. 2021

- GPA: 5.00/5.00.
- LREC 2022 publication: Singlish Where Got Rules One?
- Built a rule-based syntactic parser for Singlish.
- Recipient of Research Scholarship.

Technische Universität Dresden

GERMAN SUMMER COURSE

Online

Jun 2021

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

Nanyang Technological University

B.A. IN LINGUISTICS AND MULTILINGUAL STUDIES

Singapore

Aug. 2015 - Jun. 2019

- Graduated with Honours (Highest Distinction).
- Minor: Mathematics.
- Recipient of Research Scholarship.

Kansai Gaidai

ASIAN STUDIES PROGRAM

Osaka, Japan

Jan. 2017 - Jun. 2017

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

Projects

Nanyang Technological University

A COMPUTATIONAL GRAMMAR OF SINGLISH USING HPSG

Singapore

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%.
- Presented findings and international DELPH-IN summits and LREC 2022.

TiMi Studio and Tencent

GREEN GAME JAM

International (online)

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)

BRAINHACK

Singapore

Jun 2021

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

Extracurricular Activity

NTU Welfare Services Club

MATHS TUTOR

Singapore

Sep. 2018 - Apr. 2021

- Mentored ITE students in mathematics weekly.

NTU GEM Club

CLUB AMBASSADOR

Singapore

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

MAIN COMMITTEE MEMBER AND INTER-HALL REPRESENTATIVE

Singapore

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.

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