

## Tsz Ting, Chung

### EDUCATION

#### The Hong Kong University of Science and Technology

Doctor of Philosophy in Computer Science and Engineering

2021 - Present

#### The Chinese University of Hong Kong

Bachelor of Science (Hons) in Computer Science [1st Hons, ELITE Stream]

2017 - 2021

### WORKING EXPERIENCE

#### Pattern Recognition Center, WeChat AI, Tencent

Research Intern (AgentRL)

May 2025 - Present

#### Tencent AI Lab

Research Intern (token compression)

Nov 2023 - Sept 2024

#### Hospital Authority AI Lab

Research Assistant (search engines with QA system)

Jan 2021 - July 2021

#### Stanley Ho Big Data Decision Analytics Research Centre

Research Assistant (ASR model)

Jun 2020- Sept 2020

### AWARDS & SCHOLARSHIP

2021-Now

Hong Kong Ph.D. Fellowship, Hong Kong Research Grants Council

2021-2022

Professor Samuel Chanson Best PGTA Award, HKUST

2021-2022

RedBird Ph.D. Scholarship, HKUST

2020-2021

Dean's List Of The Engineering Faculty, CUHK

2020-2021

Silver Award For Outstanding Academic Performance, CUHK

2018-2020

ELITE Stream Student Scholarship, CUHK

### RESEARCH

#### On the Role of Chain of Thoughts in the Long In-Context Learning

Tsz Ting Chung, Lemao Liu, Mo Yu, Dit-Yan Yeung – *In Submission*.

- Many-shot CoTs exhibit patterns that contrast with many-shot ICL and previous findings in demonstration selection. Further experiments highlight the importance of model-data distribution alignment.

#### PRELUDE: A Benchmark Designed to Require Global Comprehension and Reasoning over Long Contexts

Mo Yu\*, Tsz Ting Chung\*, Chulun Zhou\*, Tong Li\*, Rui Lu\*, Jiangnan Li\*, Liyan Xu\*, Haoshu Lu, Ning Zhang, Jing Li, Jie Zhou – *In Submission*.

- Introduce a new long-context benchmark requiring global comprehension and deep reasoning. Experiments show ICL, RAG, SFT, and the DeepResearch system fall over 15% behind humans, and 30% behind in reasoning.

#### DivLogicEval: A Framework for Benchmarking Logical Reasoning Evaluation in Large Language Models

Tsz Ting Chung, Lemao Liu, Mo Yu, Dit-Yan Yeung – *EMNLP 2025 Findings*.

- Introduce a new benchmark to assess LLMs' logical reasoning while minimizing external influences, address data distribution bias, and propose a metric to reduce evaluation bias and uncertainty.

#### Unified Triplet-Level Granularity Hallucination Evaluation for Vision Language Models

Junjie Wu\*, Tsz Ting Chung\*, Kai Chen\*, Dit-Yan Yeung – *TMLR 2025*.

- Introduce a new framework to evaluate LVLMs' hallucination on the triplet level, with a benchmark dataset for evaluation and a mitigation method proposed based on the paper's findings.

#### The Stochastic Parrot on LLMs Shoulder: A Summative Assessment of Physical Concept Understanding

Mo Yu\*, Lemao Liu\*, Junjie Wu\*, Tsz Ting Chung\*, Shunchi Zhang\*, Jiangnan Li, Dit-Yan Yeung, Jie Zhou – *NAACL 2025 (Oral)*.

- Investigate the stochastic parrot phenomenon and propose a task that alleviates the memorization issue via the usage of grid-format inputs that abstractly describe physical phenomena.

#### Selection-p: Self-Supervised Task-Agnostic Prompt Compression for Faithfulness and Transferability

Tsz Ting Chung, Leyang Cui, Lemao Liu, Xinting Huang, Shuming Shi, Dit-Yan Yeung – *EMNLP 2024 Findings*.

- With simple tuning and small additional parameters, LLMs can achieve a better or similar level of performance in natural language understanding tasks with compressed demonstrations.