

RGC Ref. No.: UGC/FDS51/H03/20 <p>(please insert ref. above)</p>
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**RESEARCH GRANTS COUNCIL
COMPETITIVE RESEARCH FUNDING SCHEMES FOR
THE LOCAL SELF-FINANCING DEGREE SECTOR**

FACULTY DEVELOPMENT SCHEME (FDS)

Completion Report
(for completed projects only)

<p><u>Submission Deadlines:</u></p> <ol style="list-style-type: none"> 1. Auditor's report with unspent balance, if any: within <u>six</u> months of the approved project completion date. 2. Completion report: within <u>12</u> months of the approved project completion date.
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Part A: The Project and Investigator(s)

1. Project Title

Solving the unsolvable: Effecting speedy, massive and quality translation of Hong Kong case law on a human-machine-interactive translation platform

2. Investigator(s) and Academic Department(s) / Unit(s) Involved

Research Team	Name / Post	Unit / Department / Institution
Principal Investigator	SIN King-kui / Professor	Faculty of Arts and Humanities / UOWCHK
Co-Principal Investigator	KIT Chunyu / Professor	Translation and Linguistics / CityU
Co-Investigator(s)	CHAN Ho Yan Clara / Associate Professor	School of Humanities and Social Science /CUHK (SZ)
	IP Ho Kin Honic	Practising Barrister at Law
Others	Xuan Xi / Research Assistant	Faculty of Arts and Humanities / UOWCHK

3. Project Duration

	Original	Revised	Date of RGC / Institution Approval (must be quoted)
Project Start Date	01 / 02 / 2021	/	09 / 2020
Project Completion Date	31/12/2022	31/12/2023	07/2023

Duration (<i>in month</i>)	24	36	07/2023
Deadline for Submission of Completion Report	31/12/2023		

4.4 Please attach photo(s) of acknowledgement of RGC-funded facilities / equipment.

See attached invoice.

Part B: The Final Report

5. Project Objectives

5.1 Objectives as per original application

- 1. establish a jurilinguistic framework for the translation of case law with reference to the one established for the translation of the statute law of Hong Kong;*
- 2. build a bilingual English-Chinese parallel corpus (the “Parallel Corpus”) of selected judgments of cases decided by the Hong Kong Court of Final Appeal and by superior courts of other common law jurisdictions; and*
- 3. develop a human-machine-interactive-translation platform (the “HMIT Platform”) to facilitate efficient machine learning, user-friendly post editing, speedy, massive and quality translation of judicial judgments.*

5.2 Revised objectives

Date of approval from the RGC: NA

Reasons for the change: NA

1.

2.

3.

5.3 Realisation of the objectives

(Maximum 1 page; please state how and to what extent the project objectives have been achieved; give reasons for under-achievements and outline attempts to overcome problems, if any)

See Attachment 1.

For details, please see attached conference paper.

5.4 Summary of objectives addressed to date

Objectives <i>(as per 5.1/5.2 above)</i>	Addressed <i>(please tick)</i>	Percentage Achieved <i>(please estimate)</i>
1. The jurilinguistic framework	√	100%
2. The parallel corpus	√	100%
3. The translation model for the HMIT platform	√	50%

6. Research Outcome

6.1 Major findings and research outcome

(Maximum 1 page; please make reference to Part C where necessary)

See Attachment 2.

6.2 Potential for further development of the research and the proposed course of action

(Maximum half a page)

See Attachment 2.

7. Layman's Summary

(Describe in layman's language the nature, significance and value of the research project, in no more than 200 words)

This project aims to develop a human-machine interactive system that combines human expertise with advanced AI technologies to translate Hong Kong judicial judgments between English and Chinese, ensuring that the legal system can operate fully in both languages. We first built a corpus of bilingual legal texts and then developed a multi-agent system TAP (Translator, Annotator, and Proofreader) powered by a Large-Language-Model that combines advanced language tools with human expertise to deliver accurate, speedy, and cost-effective translations. Operationally, the Translator produces a draft, the Annotator identifies errors, and the Proofreader refines the final result. Through this cycle, the Translator learns from the feedback and continually improves performance.

By speeding up the translation process and reducing costs, TAP benefits everyone involved in the legal system, from lawyers and judges to the general public. Its interactive design also promotes better engagement between human experts and AI, generating high-quality translations that meet strict legal standards. More importantly, by providing easier access to legal information, our legal system will become more inclusive, transparent, and efficient, thus promoting respect for the law and strengthening the rule of law. Ultimately, TAP represents a major step toward creating a fairer, more accessible justice system for all.

(199 words)

Part C: Research Output**8. Peer-Reviewed Journal Publication(s) Arising Directly From This Research Project**

(Please attach a copy of the publication and/or the letter of acceptance if not yet submitted in the previous progress report(s). All listed publications must acknowledge RGC's funding support by quoting the specific grant reference.)

The Latest Status of Publications				Author(s) (denote the corresponding author with an asterisk*)	Title and Journal / Book (with the volume, pages and other necessary publishing details specified)	Submitted to RGC (indicate the year ending of the relevant progress report)	Attached to this Report (Yes or No)	Acknowledged the Support of RGC (Yes or No)	Accessible from the Institutional Repository (Yes or No)
Year of Publication	Year of Acceptance (For paper accepted but not yet published)	Under Review	Under Preparation (optional)						

9. Recognized International Conference(s) In Which Paper(s) Related To This Research Project Was / Were Delivered

(Please attach a copy of each conference abstract)

Month / Year / Place	Title	Conference Name	Submitted to RGC (indicate the year ending of the relevant progress report)	Attached to this Report (Yes or No)	Acknowledged the Support of RGC (Yes or No)	Accessible from the Institutional Repository (Yes or No)
26-27 August 2023	Solving the unsolvable: Translating case law in Hong Kong	Bilingual Legal System in Hong Kong: Retrospect and Prospect Organised by the Law Faculty, HKU	/	Yes	Yes	Yes (upon publication)
October 2022	Translating Hong Kong Case Law in the Era of AI and Big Data	The 10 th International Conference on Law, Language and Discourse (LLD 10)	29 June 2023	/	Yes	Yes

September 2021	The problem of multilingual law	Global Competitive research Funding , Summit Organized by University of Wollongong, Australia	29 June 2023	/	Yes	Yes

10. Whether Research Experience And New Knowledge Has Been Transferred / Has Contributed To Teaching And Learning

(Please elaborate)

The research experience, data, and other outcomes contribute substantially to our teaching in related courses such as Machine Translation and Human Machine Interactive Translation.

11. Student(s) Trained

(Please attach a copy of the title page of the thesis)

Name	Degree Registered for	Date of Registration	Date of Thesis Submission / Graduation
	Ph.D	01-Sept-2022	31-Aug-2026 (expected)
	Ph.D	13-Jan-2025	12-Jan-2028 (expected)

12. Other Impact

(e.g. award of patents or prizes, collaboration with other research institutions, technology transfer, teaching enhancement, etc.)

From the perspective of legal practice, accurate, speedy, and cost-effective translation of judicial judgments, particularly from English to Chinese, enables the communication of the case law embedded in judicial judgments in either Chinese or English between all stakeholders of legal proceedings, including the judiciary, public authorities, legal practitioners, Litigants, and the general public. At the present moment, communication of case law in Chinese is greatly impeded by a lack of consistency in the use of Chinese legal terminology and Chinese statements of case law.

13. Statistics on Research Outputs

	Peer-reviewed Journal Publications	Conference Papers	Scholarly Books, Monographs and Chapters	Patents Awarded	Other Research Outputs (please specify)	
No. of outputs arising directly from this research project	/	1	/	/	Type	No.
					/	/

14. Public Access Of Completion Report

(Please specify the information, if any, that cannot be provided for public access and give the reasons.)

Information that Cannot Be Provided for Public Access	Reasons
/	/