香港科技大学（广州）
THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY (GUANGZHOU)

数据科学与分析学域
DATA SCIENCE AND ANALYTICS THRUST
信息枢纽
INFORMATION HUB

DSA Research Experiences for Undergraduates

Research Project

Section1: Faculty Information

Full Name	TANG Jing	Tel	13128739008
Thrust/Hub	DSA Thrust	Office	88333889
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Section2: Research Project Proposal

Project Title	AscendFlow Law
Project Description (max 800 words)	**Project Description: AscendFlow Law – A Multimodal Universal Legal System** AscendFlow Law is an innovative, fully integrated multimodal legal AI platform designed to streamline legal document generation, review, and advisory services. Developed by undergraduate students from The Hong Kong University of Science and Technology (Guangzhou), the system addresses critical gaps in existing legal AI tools, which often lack comprehensive integration, accuracy, and adaptability. The project aims to develop a unified legal AI platform integrating contract generation, legal review, and query-answering functions, enhancing accuracy and usability in processing complex, visually rich documents via advanced VRDS (Visual Reasoning and Document Semantics) technology, significantly reducing AI-generated errors and hallucinations through Retrieval-Augmented Generation (RAG) and Mixture of Experts (MoE) methodologies, and enabling the creation of comprehensive, legally precise long-form documents using advanced encoding and attention mechanisms. **Expected Outcomes:** 1.Users experience simplified workflow by managing various legal tasks within a single, cohesive system. 2.Achievement of over 95% accuracy in document format conversion (Markdown/Latex) and rapid query responses, enhancing user efficiency. 3.Reduction of AI-generated inaccuracies and "hallucinations" in legal texts, significantly increasing their reliability and applicability in real-world scenarios. 4.Broad applicability in various sectors including legal firms, corporate legal departments, financial services, real estate, and insurance, leading to considerable cost savings and productivity gains. With its cutting-edge technologies, AscendFlow Law holds promising market potential, poised to drive significant innovation in legal tech and support digital transformation within the legal industry.

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Proposed Research Duration	Start Date: 2025 / 3 / 1 End Date: 2025 / 6 / 30		
Student/Researcher Duties	Finish the Challenge Cup Realize the functions of legal document generation, review, and advisory services		
Technical Skills Required	☑ Python ☐ R ☐ C/C++	☐ Machine Learning ☐ Deep Learning ☐ Other: _____	☐ Big Data ☐ SQL
Preferred Student/Researcher Background	Statistics and AI		
Maximum Number of Students/Researchers	☑ 1	☐ 2	

Section3: Pre-Application Research Exposure Meeting

Faculty members are encouraged to schedule a Research Exposure Meeting to introduce students to their projects.

Preferred Date	17/3/2025	
Preferred Time	14:00-17:00	
Meeting Mode	☑ In-Person	☐ Online
Venue (if in-person)	E3 502	
Meeting Link (if online)		

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