HKU Summer Research Programme 2024

List of Potential Mentors

Faculty / Interdisciplinary Area: **Musketeers Foundation Institute of Data Science**

	Department / Discipline	Title	Last Name	First Name	Contact Email	Personal Homepage	Research Area(s) / Topic(s)	Remarks
1	Institute of Data Science	Dr	ZHANG	Qingpeng	qpzhang@hku.hk	https://datascience.hku.hk/people/qingpeng-zhang/	AI in medicine	Computing or medicine background students with strong interest in research are welcome.
2	Institute of Data Science	Dr	HUANG	Wenjie	huangwj@hku.hk	https://sites.google.com/view/huangwenjie	Robust Optimization, Data-driven Decision-Making, Reinforcement Learning	
3	Institute of Data Science	Dr	LIU	Xihui	xihuiliu@hku.hk	https://xh-liu.github.io/	computer vision, deep learning, generative AI, multimodal AI	
4	Institute of Data Science	Dr	YANG	Yanchao	yanchaoy@hku.hk	https://yanchaoyang.github.io/	Computer Vision, Machine Learning, Representation Learning, Self-Supervised Learning, Geometric Processing, Robotics, and Human-Machine Interaction.	We do research in embodied AI and are interested in self-supervised and semi-supervised techniques that allow embodied agents to learn at low-annotation regimes. Our long-term goal is to design learning algorithms that enable embodied agents to continuously build scene representations and acquire interaction skills through active perception with multimodal signals. Our recent effort is to develop efficient mutual information estimators and automate the learning of perception, compositional scene representation, and interaction policy for embodied intelligence. We are also grounding Large Foundation Models to the physical world via information-theoretic tools. We are constantly looking for talents with strong motivation to build fundamentals for autonomous agents to learn from unlimited data streams toward intelligent interactions with the physical world. This quest is related but not limited to computer vision and graphics, machine learning, communication and information theory, multimodal data mining, robotics, and human-machine interaction. Students can choose either EEE or Data Science when applying, but make sure to notify me after the submission. Strong Ph.D. candidates are wellcome to apply for HKPFS and HKUPS.
5	Institute of Data Science	Dr	YU	Tao	tyu@cs.hku.hk	https://taoyds.github.io/	Natural Language Processing, Deep Learning, Dialog Systems, Natural Language Interfaces	
6	Institute of Data Science	Dr	XIE	Yue	yxie21@hku.hk	https://yue-xie.github.io/	Optimization, Machine learning, Optimal transport	