

Project Title: Frontier and Human-centric AI and Robotics Technology for Geriatric Care

Abstract

Life expectancy or lifespan in Hong Kong is among the world's highest and has been increasing. Unfortunately, increases in health span - the period of time Hong Kongers are in good health - have not kept pace with the rise in longevity. This has resulted in a growing gap: the disability burden. We are spending an increasing percentage of our lives in a state of frailty and disability. This increases stress on our family members, caregivers, and healthcare systems. There is also an "inverted pyramid" of medical training: those who spend the most time caring for the frail elderly have the least formal training. These two trends have led to many unmet needs in elderly care.

The project aims to improve older individuals' mental and physical care by developing human-centric frontier artificial intelligence (AI) and robotics technology, which will empower both the elderly themselves and their carers to manage health and address frailty. Unlike conventional approaches to healthcare which typically consider diseases in isolation, the human-centric view at the core of our approach takes a broader multi-faceted perspective, recognizing that care should address not only medical but also social and psychological needs such as emotional support and companionship.