Research statement

My research interests focus on identifying support needs of Asian American caregivers of persons with dementia (PwD) in order to support future development of a culturally and linguistically appropriate caregiving mobile app. The other lines of studies have focused on data driven analyses. These studies have implemented data-mining and text mining techniques (a) to classify mobile health resources from the literature, (b) to capture needs of PwD and their caregivers, and (c) for discovery knowledge technology based applications and types of services. Current ongoing project is to develop, and pilot test an audio and radio sensing system to support early Alzheimer and caregivers on care at home.

My prior studies have yielded useful insights into health consumer behavior and needs. These prior studies assessed: (a) consumers health behavioral patterns and needs of KAs and older adults clearly demonstrating that diverse and distinctive medical and social factors are intertwined with their health behavior; and (b) digital health literacy and mental health disorders and (c) mobile health application development projects that also captured emergent themes in technology-oriented approaches to mental health issues. These studies have taken interdisciplinary and patient-oriented approaches to finding ways to empower KAs and older adults with digital technologies based on their health behavior and needs. Another study funded by Florida State University’s Council on Research & Creativity investigated use of technology as a coping tool for reducing anxiety and depression along with improving resilience and coping mechanisms during the COVID-19 pandemic among older Korean Americans. Their levels of digital health literacy and attitudes toward adopting technology are also measured as factors to influence social isolation which cause of anxiety or depression. My experience from previous studies regarding health consumers’ needs, implication of technology, and older adults has prepared me to lead investigations on health caregivers needs and using technology to dealing with stress or burden. In addition, this previous research experiences extended my knowledge and skills in innovative digital technology to develop and implement a mobile app intervention tool that is customized to caregivers needs of people with Alzheimer.