

# Physical and Social Assistance for Aging Society

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Aging society is a world-wide crisis. It's been happening in Japan first, and there are many more countries following closely behind including the US. At Toyota Research Institute, we want to improve the quality of life for aging society through both direct and indirect efforts. I've spent the 6 years learning about Older Adults in Japan and in the US and their needs and wants through a human first, technology second perspective. I'll talk about 2 of my collaborative aging-in-place projects - Punyo which looks at Older Adults' needs relating to physical assistance in the home, and I.R.I.S. which focuses on helping Older Adults to achieve and maintain their sense of purpose.



Dr. Katherine (Kate) Tsui is manager of the Human Robot Interaction Research team within the Robotics division at Toyota Research Institute (TRI). Dr. Tsui has 15 years of experience in Human-Robot Interaction (HRI) research and leads the HRI team and university collaborations. Our HRI research focuses on people's trust towards home robot helpers and using robotic technology to help older adults with social isolation and loneliness.

Dr. Tsui holds a Ph.D. in computer science from the University of Massachusetts Lowell (2014) and was a postdoctoral associate at Yale University (2014-2016). Dr. Tsui has developed robotic systems and user interfaces and interactions for people with cognitive and motor impairments as the target end-user, including a vision-based wheelchair-mounted robotic arm, social telepresence robots named Hugo and Margo, and a socially assistive robot named Maki. Over the last decade, she has worked with clinicians and end users from several special populations, including children with Autism Spectrum Disorder, teenagers and young adults with Cerebral Palsy, adults and seniors with Brain Injury, and deaf infants. Her human-robot interaction and human-computer interaction research interests stem from the cross section of computer science, robotics, and assistive technology. Dr. Tsui is passionate about increasing the quality of life for all people using robotic devices.

FRIDAY  
Apr 5  
10-11AM

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