

# **Social Robotics Lab**





## VISION

# **Robotics for Education**

Fascinating subjects for engineering design and science research and advanced platforms for learning, teaching, and exploration.

# **Robotics for Healthcare**

High-Tech embodiment of science, engineering and art for healthcare, childcare and eldercare.

### **Robotics for Entertainment**

Rsing stars in the industry, entertainment, either as virtual or physical characters.

# **ABOUT SOCIAL ROBOTICS LAB**

The Social Robotics Laboratory (SRL) is a research laboratory focused on socially competent, personal, healthcare and

## MISSION

Advanced cross disciplinary research of social robotics for globally improving people's lives.

Sophisticated common R&D platforms under one roof for more cohesive and vibrant research across the arts, engineering, medicine and sciences.

Dedicated human capital development for creativity, leadership and visionary in the area of social personal, healthcare and edutainment robotics.

High intellectual properties through

edutainment robotics internationally for scientific, social and economical impacts through the synergy from arts, engineering, medicine and sciences. The multi-faceted research program conducted in SRL is structured to investigate all aspects of social, personal, medical and edutainment robotics. It aims to produce a seamless integration of artificial agents into the human society, which can be safely deployed in myriad social applications. These robots will act as intelligent companions which enrich the lives and co-exist in harmony with humans.

outputs for technology transfer and start ups in making social and economic impact.

Quality joint research and international collaboration.

### INTELLIGENT ROBOT

Nancy is a human-sized articulated robot with the capacity for friendly social interaction. Nancy is designed to traverse the home environment fashionable and safely while delivering care and assistance to the family. Utilizing the sensor fusion and environmental sensors, Nancy is capable of providing affectionate



### **HOTEL ROBOT**

Adam has the potential to transform hospitality the way service providers operate today. It has the ability to amaze guests and energize hotel receptions, ceremonies other special and events as well as to provide intuitively information through multiple interactive channels. From another perspective, it is also a powerful marketing tool that will bring hotel services to the next level.

## **ROBOT FOR CHILDCARE**

Carinet is a social robot which aims to provide safety-guaranteed natural interaction with and children. Carinet can act as a for children's platform entertainment and education such as storytelling, interactive game playing, etc. For storytelling, story summarization and emotion utilized association are to generate child favored version of story, and makes the storytelling more interesting.

Fig. 1 Robotic Nurse Nancy Safely Interacting with Human social gestures like hugging and giving a pat on the back making her suitable companion in homes. Through advances in artificial intelligence, Nancy is able to accompany, entertain and even conduct lively conversations with people, especially the elderly during their slower days.



Fig. 3 Robotic Bear Carinet for Child Companion

Director of SRL: Prof. Shuzhi Sam Ge Office Contact: 65166821 Email: <u>samge@nus.edu.sg</u> Website: <u>http://robotics.nus.edu.sg</u>

Fig. 2 Hotel Robot Adam for Guest Reception

Lab Location: Social Robotics Lab, Interactive & Digital Media Institute, National University of Singapore, 21 Heng Mui Keng Terrace, Singapore 119613