Welcome to SybLab

Human Machine SymBiosis Laboratory

2025

Human Machine Symbiosis Laboratory

Purpose

Human and Machine Symbiosis

- Considering a mechanism for humans and robots to grow together -

Research Field

- Machine Learning [Deep Learning, Reinforcement Learning, Generative AI]
- Cognitive Developmental Robotics [Cognitive Learning, Motor Learning]
- Care, Medical, and Welfare Support [Rehabilitation]

Contents

- Research Topics
- Laboratory Life
- Research Environmen

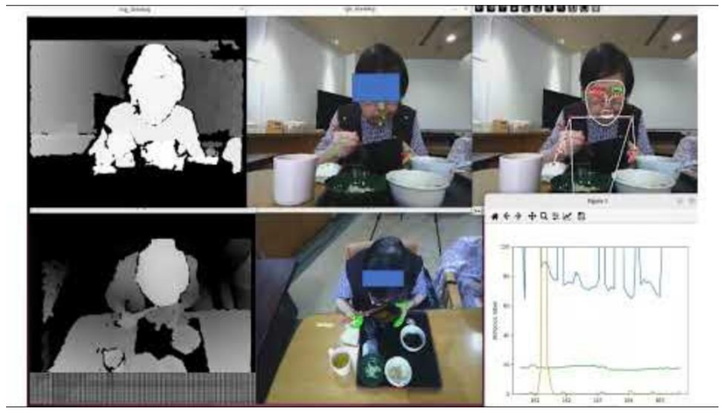


Research Topics



01 Meal

Cibo

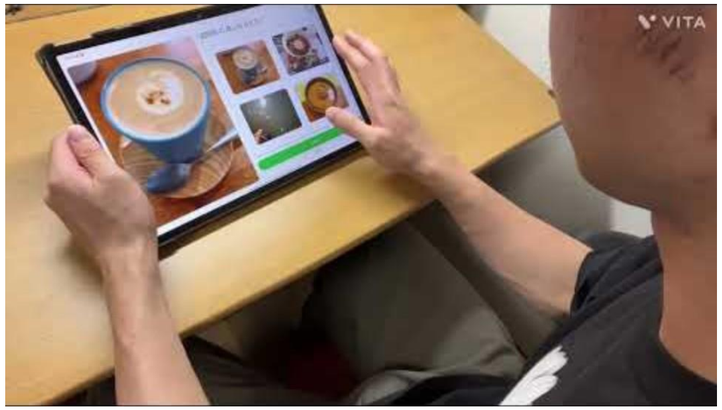


YouTube

目的：誤嚥を予防し食事量を増やす介入方法を明確にする
方法：誤嚥予防のために食行動を測定して声掛けする

02 Memory

Memoria

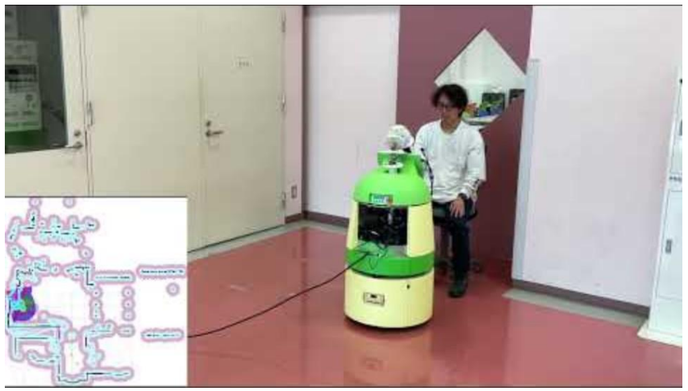


YouTube

目的：生活記憶を留める課題生成と解答方法を明確にする
方法：思い出写真の属性に関するクイズ課題に解答する

03 Vital

Lucia Spina

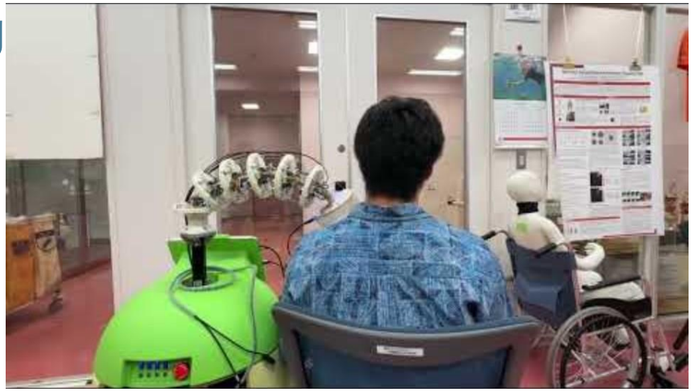


YouTube1　YouTube2

目的：バイタルサインの自動測定方法を明確にする
方法：体調管理のために生理情報を測定して声掛けする

04 Awakening

Tatto

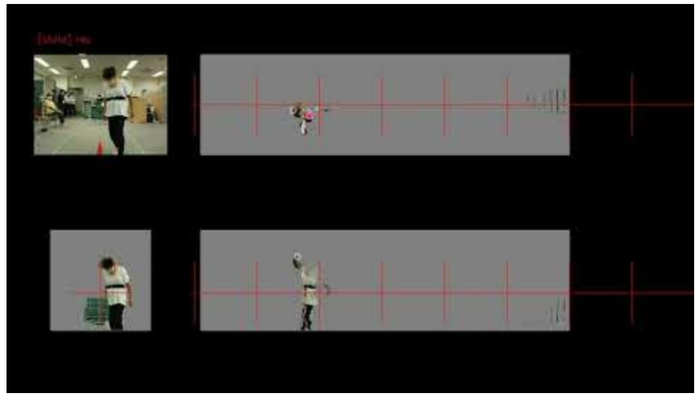


YouTube1　YouTube2

目的：日中の軽眠を妨げ覚醒を高める方法を明確にする
方法：睡眠管理のために軽眠を検知して接触する

05 Walking

Camina



YouTube

目的：歩行の測定可視化と運動評価の方法を明確にする
方法：歩行維持のために歩行を測定して評価可視化する

06 fingers

Mano

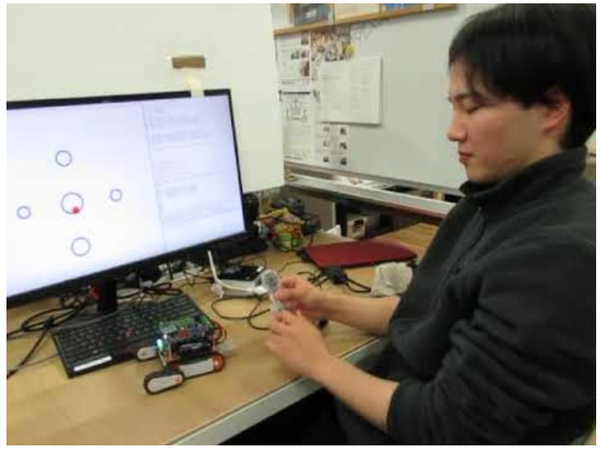


YouTube1　YouTube2　YouTube3

目的：関節運動補助で可動域を拡大する方法を明確化する
方法：関節機能の維持のため駆動力で指を屈曲伸展する

07 oral cavity

Orale

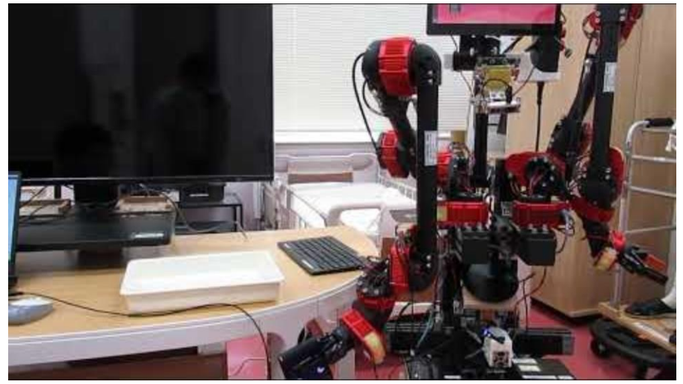


YouTube

目的：口腔の感覚運動による機器操作の方法を明確にする
方法：生活自立のために舌運動を測定して機器操作する

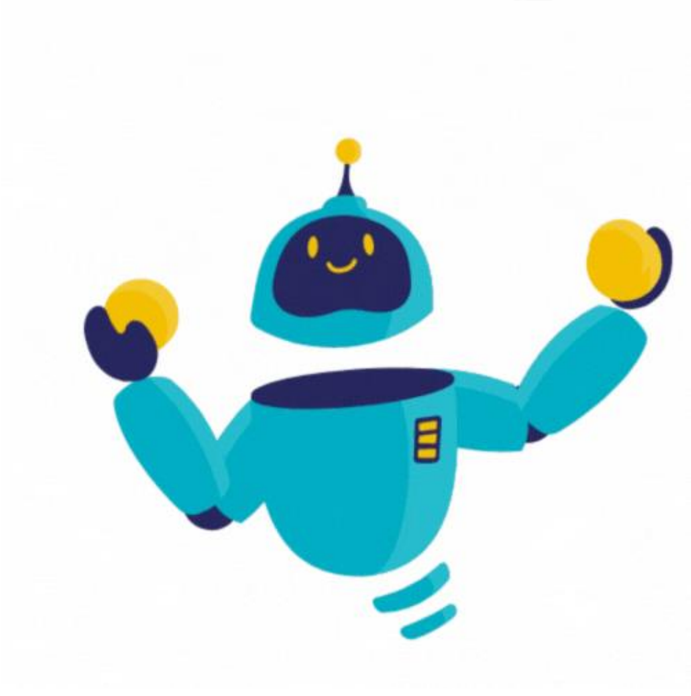
08 Sensory Prediction

Mani



YouTube

Laboratory Life



Field Test in Nursing Care Facilities

Date: August 25th to September 1st







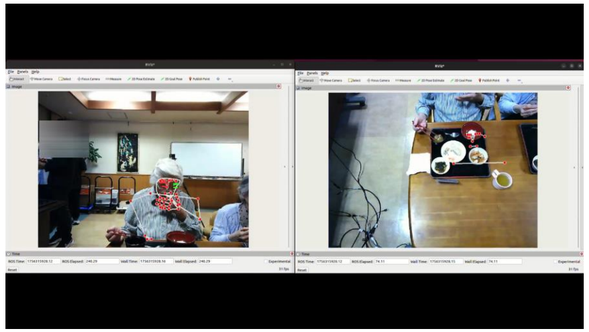


Field Test in Nursing Care Facilities

Date: August 25th to September 1st

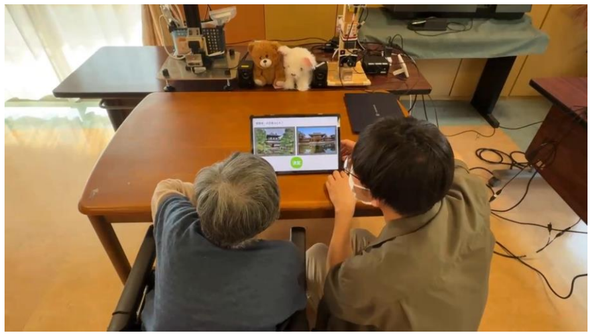
01 食事

Cibo



02 記憶

Memoria



03 生理

Lucia Spina



04 覚醒

Tatto

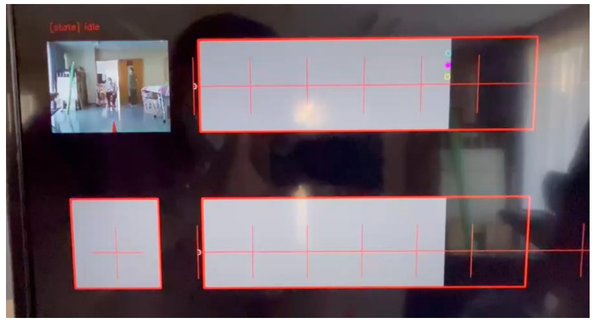


Field Test in Nursing Care Facilities

Date: August 25th to September 1st

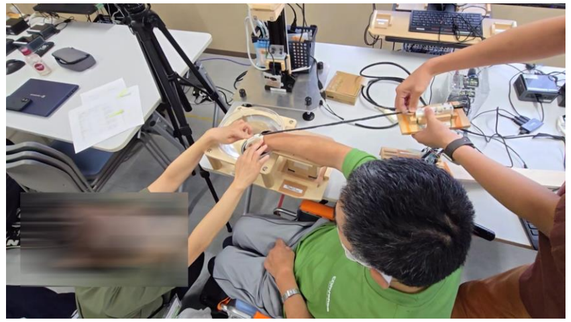
05 歩行

Camina



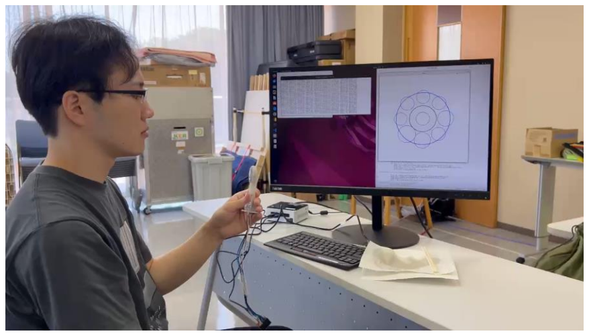
06 手指

Mano



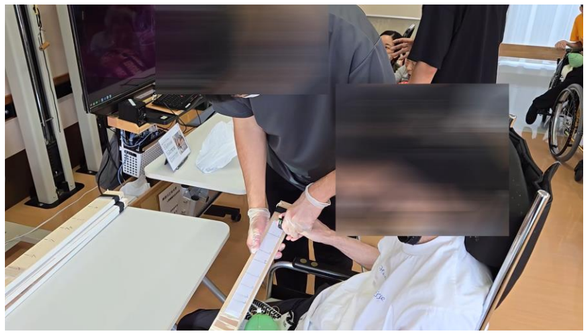
07 口腔

Orale



08 感覚予測

Mani

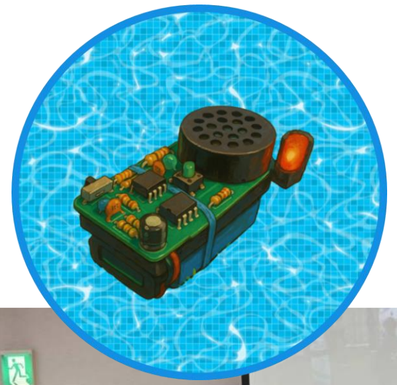


International Exchange



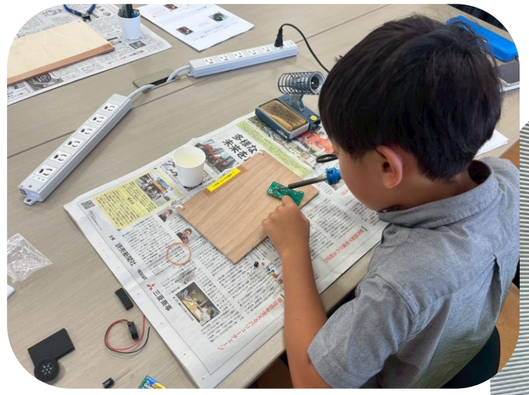
Kids' Craft Workshop

Date: August 8th



Theremin

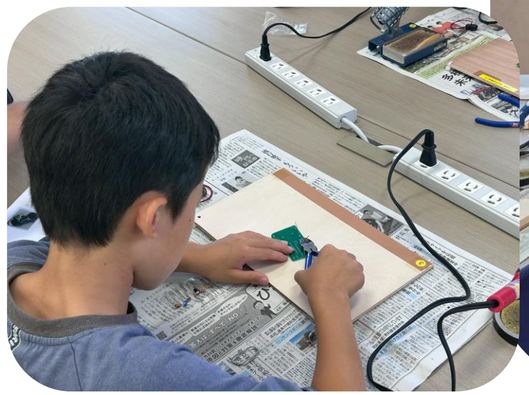
YouTube







YouTube





Trip to Miyakejima

Date: May 1st to 3rd











Summer Seminar in Karuizawa

Date: August 1st to 3rd











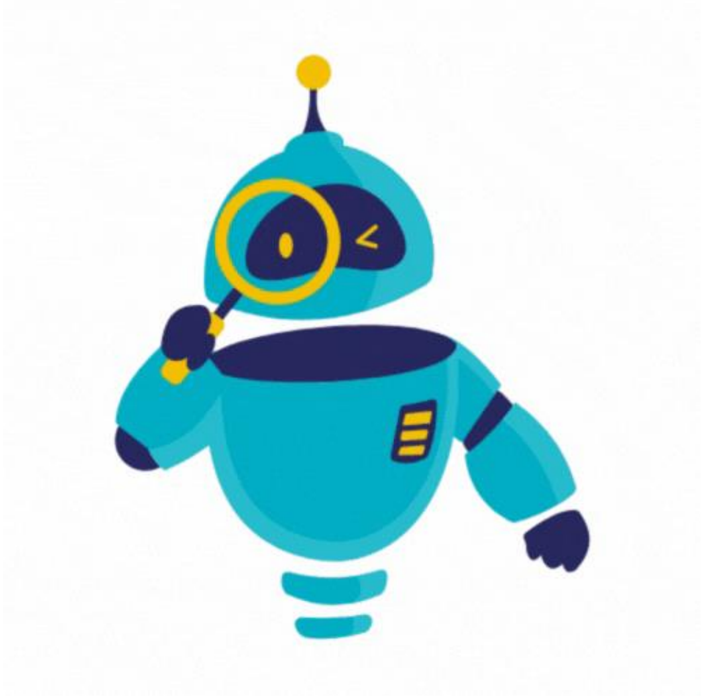








Research Environment



Research Environment



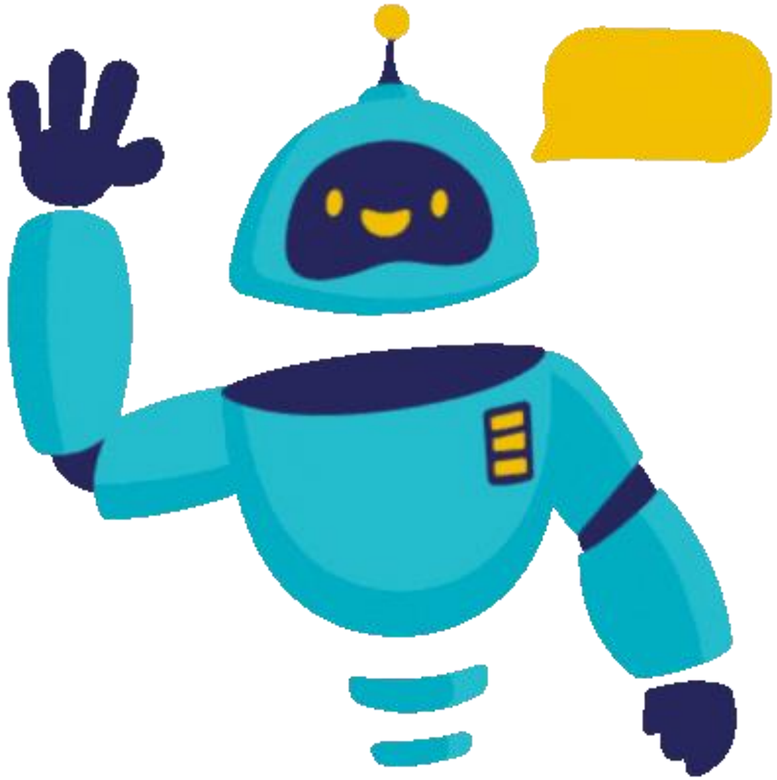
Disk & Monitor



Round Table



Exhibition room



Contact

ryo.saegusa@syblab.org