

SEZAKI LAB.

Urban Sensing and Ubiquitous Computing



Department of Informatics and Electronics

Department of Information and Communication Engineering,
Graduate School of Information Science and Technology
Socio-Cultural Environmental Studies,
Graduate School of Frontier Sciences

Information and Communication Engineering

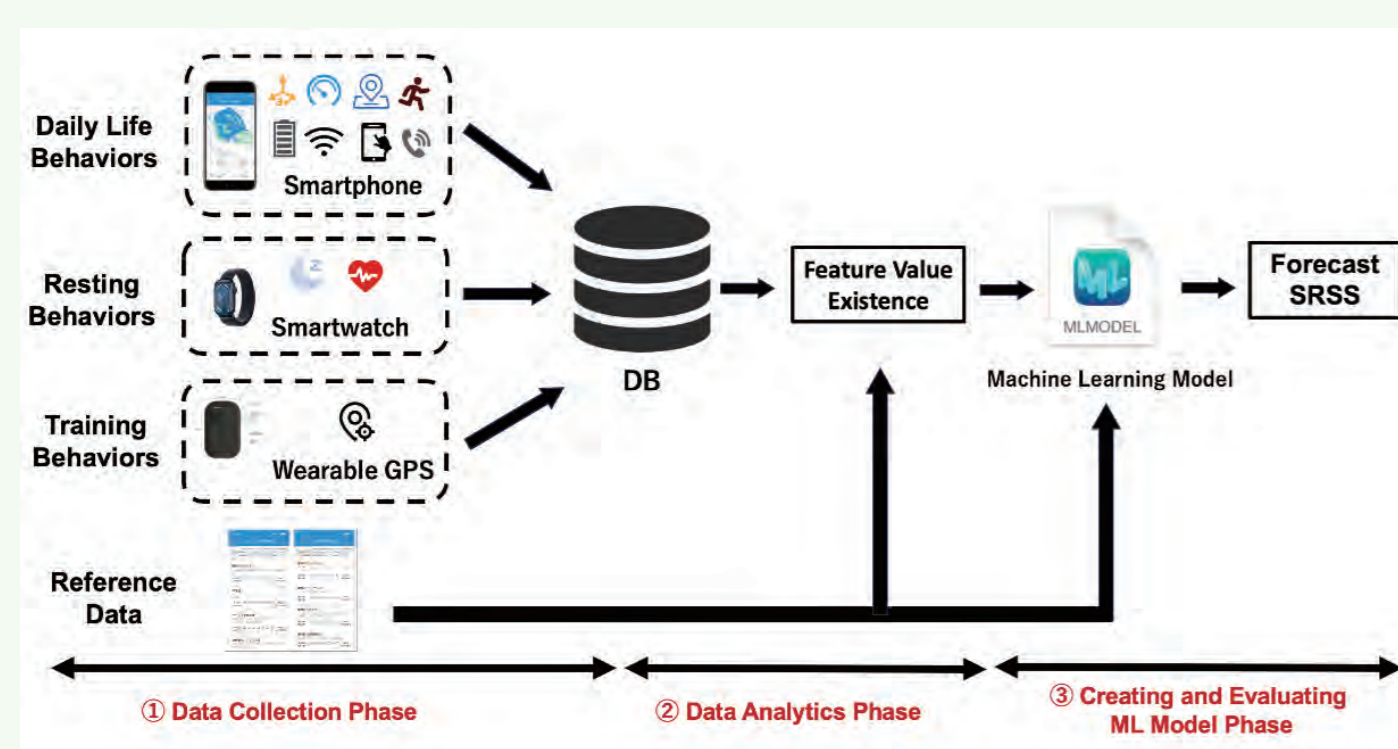
<https://www.mcl.iis.u-tokyo.ac.jp/>

Research topics:

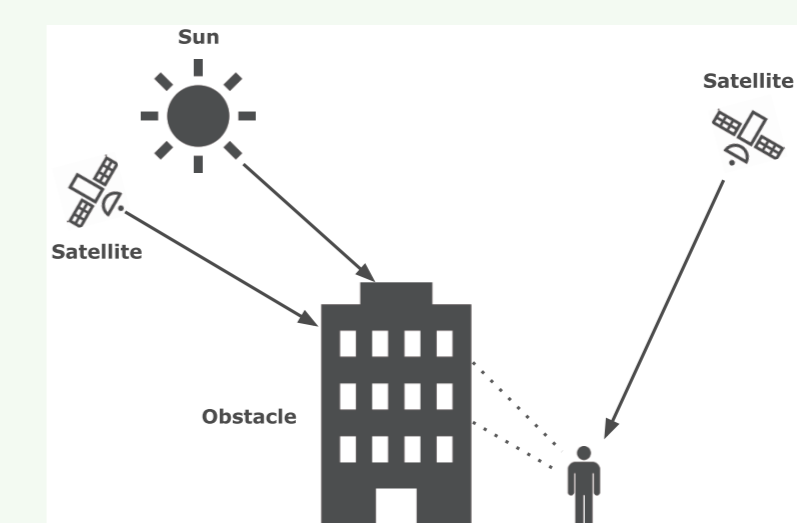
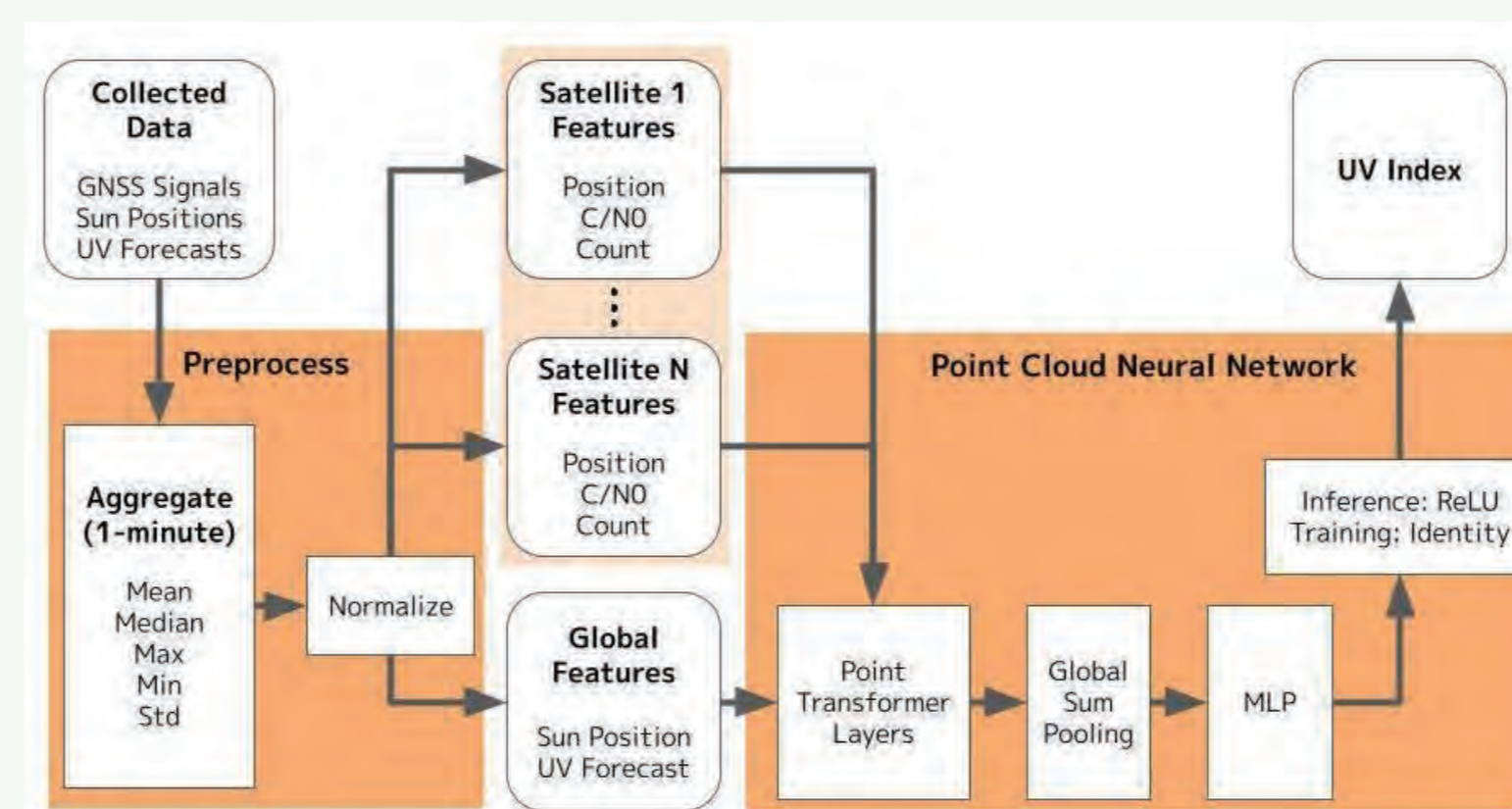
1. to consider the support of the creative social activities, which utilize networks, and the creation of new applications
2. to operate the network element, system technology and system development of various applications

Behavioral Change & Well-being

Sensing for detecting stress and recovery state of student-athletes



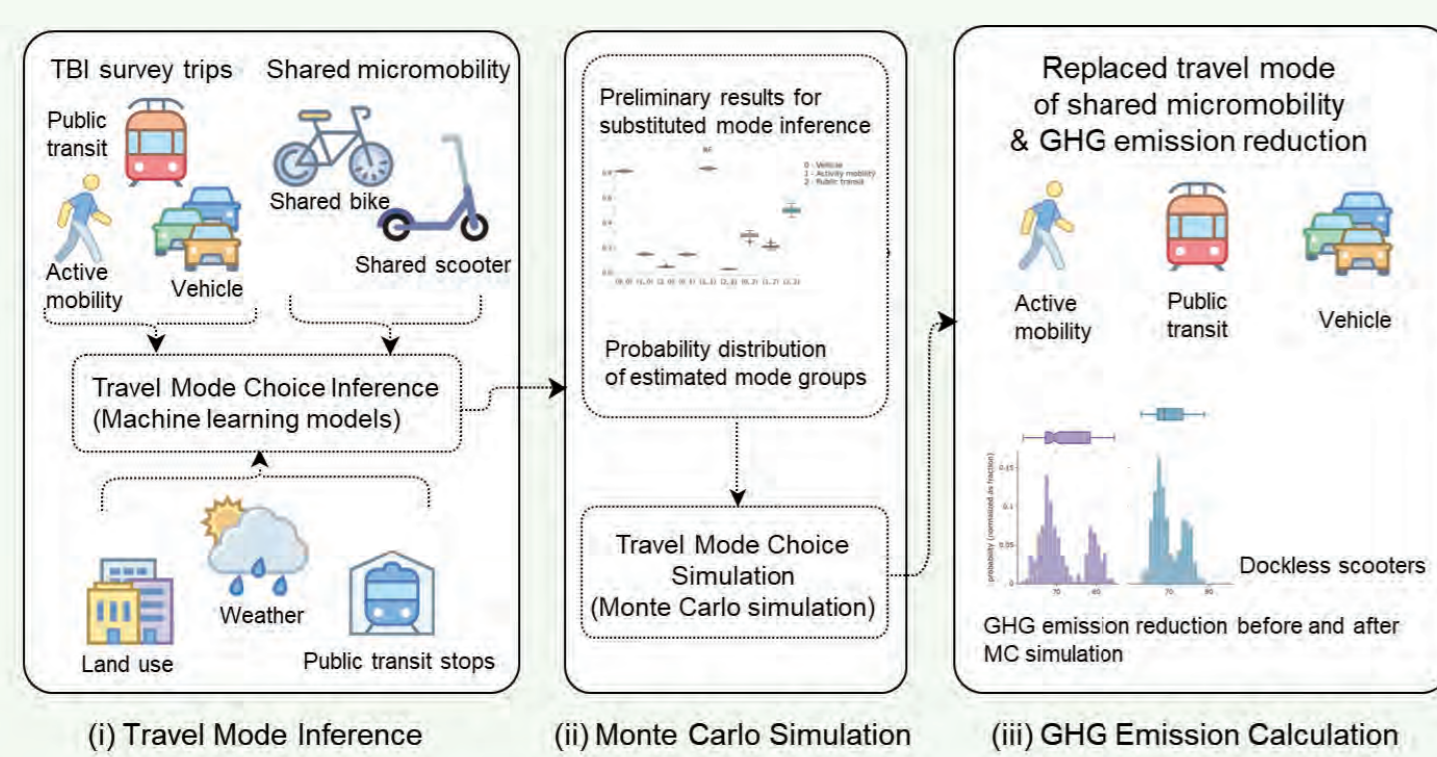
UV index estimation leveraging GNSS signals available on smartphones and obstacle distribution around the user



Societal Transformation

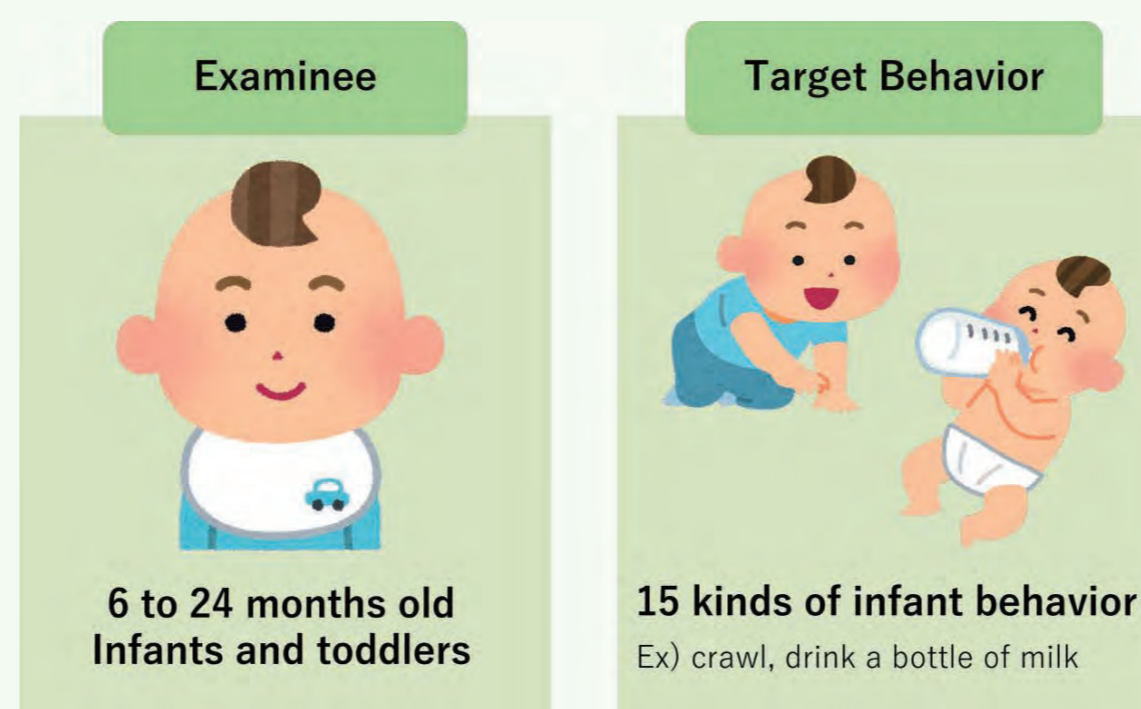
Spatial Analytics

Estimation of greenhouse gas emission reduction by shared micromobility system



Mobile & Wearable Sensing

Detecting childcare activities using wearable devices



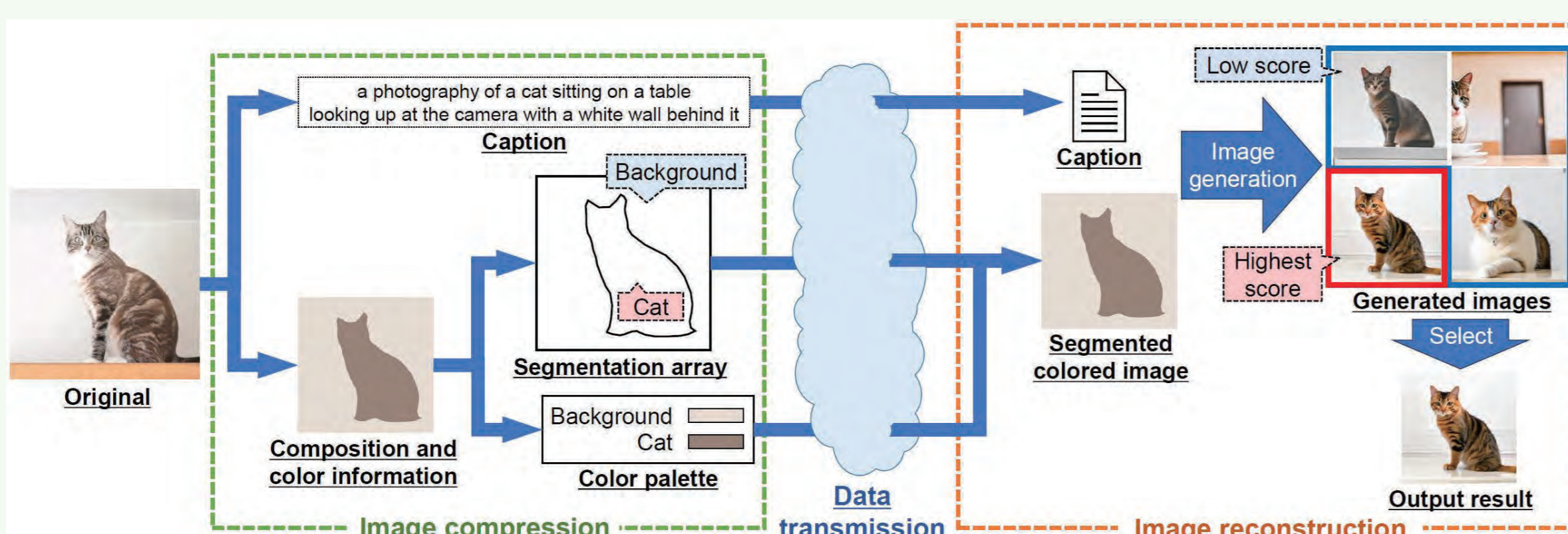
Detecting postpartum depression using indoor environmental sensors



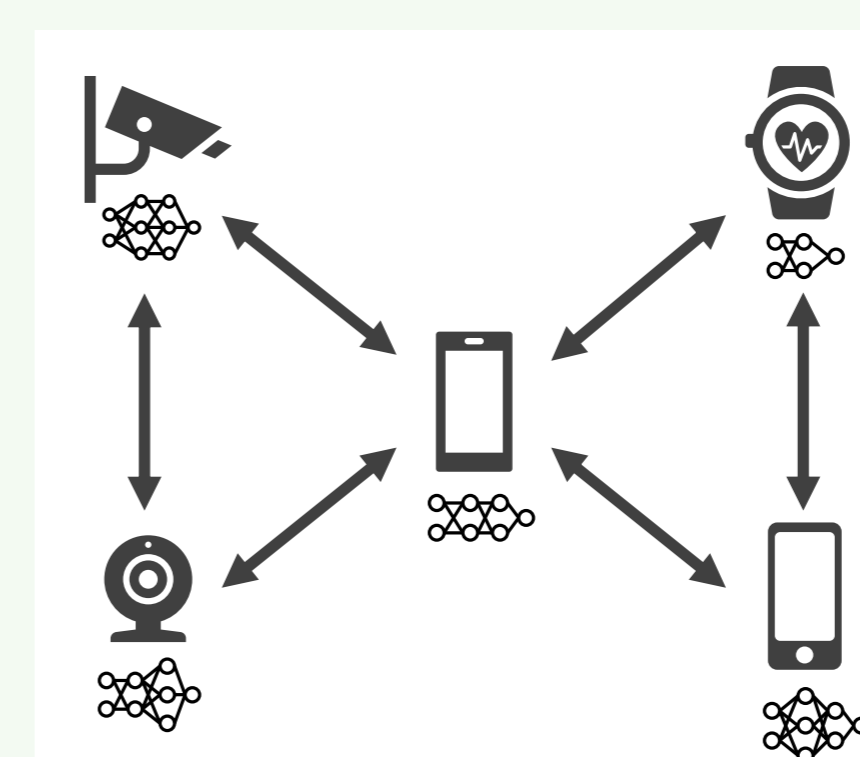
Analysis & Estimation

Wireless Sensor Networks & Decentralized Learning

Semantic communication leveraging generative AI for capacity-limited networks



Privacy-protecting distributed machine learning for wearable and IoT devices



Fundamental Technology