## 114<sup>th</sup> WPI-IIIS Seminar

## Recomposition of Human Presence: Building feedback loops between Human Intelligence and Machine Intelligence

Digital Nature Group has focused on the research of the relationship between waves, material, and intelligence by computational environments towards building feedback loops between Human Intelligence and Machine Intelligence. From the viewpoint of computer science research, they are prototyping the systems to combine wave engineering, bio- & meta- materials by digital fabrication and deep learning in order to find out the new ecosystem in the digital age.

They consist of over 40 people includes students, researchers and professor who are interested in Wave Engineering / Machine Learning / Materials Research, and they are promoting research and development not only for academic research but also deployment to society.

As the series of their prototyping, they are developing software that can output the alternative cloth design of famous designers through deep learning in order to build making loops between ordinary designers and machine intelligence, developing automized wheelchairs, artificial hands, artificial legs as part of body aid and forming loops including the spatial recognition of machine intelligence with relationship between light, sound and human body. All of these projects stand on the linkage between digital fabrication technology, wave engineering technology and machine learning technology.



## Dr. Yoichi Ochiai

Faculty of Library, Information & Media Science, University of Tsukuba

Date: Friday, July 28, 2017 Time: 9:00 – 10:00 Venue: 1F Auditorium, IIIS Building



INTERNATIONAL INSTITUTE FOR INTE SLEEP MEDICINE

> Contact: International Institute for Integrative Sleep Medicine, University of Tsukuba 029-853-8080 (ext. 8080) | wpi-iiis-alliance@ml.cc.tsukuba.ac.jp