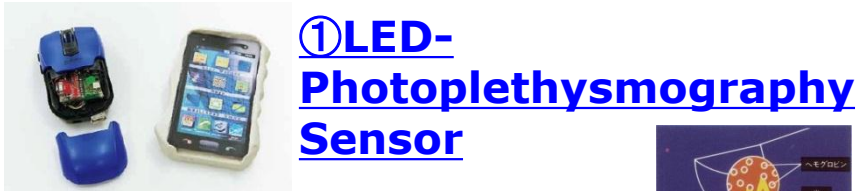
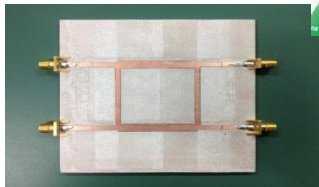
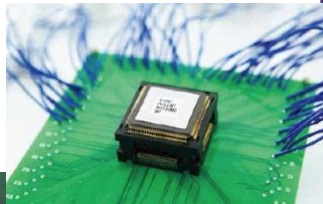


Development of Ubiquitous Health-care System

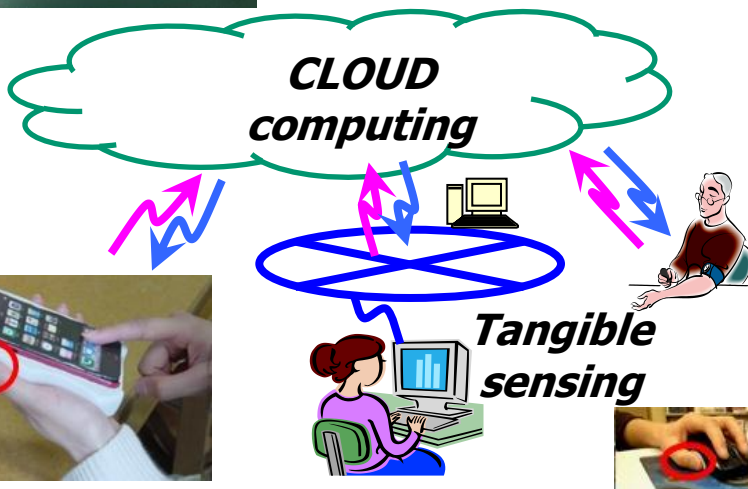
Associate Professor **Michio YOKOYAMA**



② **LSI Design**



③ **Transmission-Line Planer Board**



We're working on the development of a ubiquitous system with which health management can be performed "anytime and anywhere".

① "**Measuring**" We are developing a system useful for health management in which fingertip pulse waves are measured and then not only pulse but blood pressure and stress are also estimated and calculated.

The natural biological data is measured in ordinary activities such as operating a PC, a smartphone, a game machine, and the like without noticing measurement and is analyzed. The system is under development to provide health management with a touch of it and advice as necessary.

② "**Processing**" We are designing, prototyping, and evaluating the IC chips by ourselves to perform arithmetic processing of measured signals. We set the goal to develop an environment-friendly ecosystem that is compact and ultra-low power consuming with use of a new method called adiabatic logic circuit technique.

③ "**Transmitting**" In the ubiquitous health management system, it is indispensable to transmit data using high-frequency radio communication. Thus, we design antennas, signal processing filters, amplifiers, and more and implement those on compact and highly-functional boards.

Yamagata University Graduate School of Science and Engineering
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Ubiquitous Health-care System