# Takine Laboratory Robust Networking Area

## Our Research Interests: Robust network design grounded in Mathematics

As represented by such terms as ``cloud'' and ``big data,'' the maturation of information networks has led to the integration of information processing and data communication. Also, virtualization technologies for network systems have been rapidly developing with the concepts of Software-Defined Networking (SDN) and Network Function Virtualization (NFV). Based on such technical trends, our laboratory studies robust design of network systems that can provide appropriate information/communication services to users at any time regardless of being in normal or emergency situations. Although we conduct our research on diverse topics in the network system design, we take consistent approaches to them which are firmly grounded in mathematical theory, including the queueing theory, Markov analysis, stochastic geometry, and mathematical optimization.

## Staff

### Professor Tetsuya Takine

TEL: 06-6879-7740 E-Mail: takine[at]comm.eng.osaka-u.ac.jp

#### Associate Professor Tatsuaki Kimura

TEL: 06-6879-7741 E-Mail: kimura[at]comm.eng.osaka-u.ac.jp

#### Assistant <u>Professor</u> Yoshiaki Inoue

TEL: 06-6879-7742 E-Mail: yoshiaki[at]comm.eng.osaka-u.ac.jp

Please replace [at] with @





## Keywords:

New-generation Networking, Internet of Things (IoT), Machine-to-Machine (M2M), Cloud Computing, Data Centers, Queueing Theory, Mathematical Optimization.