Developing Application Software for Networks, etc.

Ken-ichi HAYAMI

Associate Professor	hayami@sendai-nct.ac.jp
Affiliated Societies	Information Processing Society of Japan; The Institute of Electronics, Information and Communication Engineers; Society of Computer Chemistry, Japan; The Chemical Society of Japan; American Chemical Society
Keywords	Communication and network engineering-related (21020), Software-related (60050), Information network-related (60060), Information security-related (60070)

Research Topics

- Delivery of WWW contents
- Difficulty of CAPTCHA using letters
- Wireless network maintenance and wave propagation improvement
- System applied for ID cards
- Recording and playback software for operations on PC
- Graphing for chemical structures

Research Seeds

・ We are comparing display speeds between hyper-links and in-line images on a WWW page based on delivery conditions. Furthermore, we assess how to maintain and use WWW and its proxy server, and of PHP and SQL sites for study training.

IPSJ Tohoku Branch SIG Technical Report, 2016-7-B2-3 (March 2017)

・ We are comparing differences between humans and computers (OCR) for difficulty of CAPTCHA using letters.

IPSJ Tohoku Branch SIG Technical Report, 2014-5-A1-2 (March 2015)

・ We maintain of a wireless network and improve wave propagation, in a usual environment as a dormitory. This system is provided with 2.4 GHz and 5 GHz bands. This system is maintained and managed by RADIUS server in our laboratory.

Kosen Forum, PO_A32 (August 2013)

・ We are developing systems applied for ID cards with IC chips and barcodes and magnetic stripes using our original reading program. Furthermore, a system has been applied for entering and leaving a room, and for a bicycle management system for a human (student ID cards with IC chips) and bicycle (key tag with IC chips).

Tohoku Kosen Sangaku-renkei Symposium T15-P-76 (December 2015)

・ We are developing recording and playback software for operations on PC for consideration of supporting users and security. Now it can play back key-typing, mouse-control by buttons and wheel and tracks, and windows with position and size and foreground or background for a target application.

IPSJ Tohoku Branch SIG Technical Report, 2013-4-15 (December 2013)

・ We graph chemical structures. Furthermore, we are developing several programs for estimation to connectivity from a rational formula, and generation of two-dimensional coordinates and drawings.

The Chemical Software Society of Japan, 304 (November 2000)

Related Technology

- Server construction and maintenance