

**Proceedings**

**The 4th International Symposium on Advanced  
Technologies and Applications in the Internet of Things**

**ATAIT 2022**

**August 24 – 26, 2022**

**Hybrid Conference**

**Venue: Osaka Ibaraki Campus at  
Ritsumeikan University**



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# ATAIT 2022

The 4th International Symposium on Advanced Technologies and Applications in the Internet of Things (ATAIT 2022) is held as hybrid conference both on-line and in Ibaraki, Osaka, Japan on August 24-26, 2022 and is sponsored by the VLSI center of Ritsumeikan University and supported by IEEE CEDA All Japan Joint Chapter. ATAIT provides an international symposium for professionals, academics, and researchers to present latest developments in IoT technologies and applications, including the network, security, processor architecture, high performance computing, image processing, FPGAs and GPUs, etc. It particularly welcomes those emerging methodologies and techniques which bridge theoretical studies and applications in the Internet of Things.

In 2022, the conference will take place as a hybrid conference due to the COVID-19 situation. The 4th ATAIT conference will be held in from 24 to 26 August and is chaired by Prof. Xiangbo Kong, Ritsumeikan University, Japan.

## Awards

**Best Paper Award** presented to

**Masaki Sano, Hiroki Nishikawa, Xiangbo Kong, Hiroyuki Tomiyama,  
Tongxin Yang, Tomoaki Ukezono, and Toshinori Sato**

for the paper entitled “An Accuracy-Controllable Approximate Adder for FPGAs”

**Best Student Paper Award** presented to

**Madoka Sakou, Kunihiro Kuroda, Yuta Fukuda,  
Kota Yoshida, and Takeshi Fujino**

for the paper entitled “Deep Learning Side-Channel Attacks against Hardware-Implemented Lightweight Cipher Midori 64”

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