

2024 IEEE 24th International Conference on Communication Technology

Track 14. Reconfigurable Intelligent Surfaces

To support high-speed and seamless data services in future wireless systems, a variety of transmission techniques exploiting the implicit randomness of the wireless environment has received increasing attention, such as massive MIMO. However, these techniques require extra hardware implementation with inevitable power consumption. Further, since these techniques only passively adapt to wireless environments, the quality of service is not always guaranteed in harsh propagation environments. To cope with these challenges, reconfigurable intelligent surfaces (RIS) serve as a promising solution. A RIS is a planar structure that is engineered to have properties that enable the dynamic control of the electromagnetic waves. Benefitted from such a programmable characteristic, RIS serves as a part of reconfigurable propagation environment, which directly reflect signals towards receivers without extra power sources or hardware, thereby improving link quality and coverage. This track focuses on attracting novel and solid contributions on the emerging topic of RIS for future wireless communication.

Topics

01. Channel modeling and estimation for RIS-based wireless communications
02. Fundamental performance limit of RIS assisted wireless communications
03. Joint active and passive beamforming design for RIS-empowered wireless networks
04. Multiple Access design for RIS-empowered wireless networks
05. Testbed and experimental results of RIS
06. AI-inspired design and management of RIS-based networks
07. Reconfigurable holographic surface (RHS)-empowered wireless communications
08. RHS-based integrated sensing and communication

Track Chairs



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Paper Submission Deadline

July 10th, 2024

Notification of Acceptance

August 5th, 2024

Submission Instruction

Submission Link <https://easychair.org/conferences/?conf=icct2024> and select Track 1

Template Paper (Word): <https://icct2024.com/IEEEtemplate-word.doc>

Template Paper (LaTeX): <https://icct2024.com/ieee-conference-latex-template.zip>

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