

Contents

Vol. 66 No. 3 March 2023

Special Topic: Spectrum, Coverage, and Enabling Technologies for Intelligent 6G

| | |
|--|-------------|
| Toward ubiquitous and intelligent 6G networks: from architecture to technology..... | 130300(2) |
| Wei XU, Yongming HUANG, Wei WANG, Fusheng ZHU & Xinsheng JI | |
| Pushing AI to wireless network edge: an overview on integrated sensing, communication, and computation towards 6G..... | 130301(19) |
| Guangxu ZHU, Zhonghao LYU, Xiang JIAO, Peixi LIU, Mingzhe CHEN, Jie XU, Shuguang CUI & Ping ZHANG | |
| SpectrumChain: a disruptive dynamic spectrum-sharing framework for 6G | 130302(14) |
| Qihui WU, Wei WANG, Zuguang LI, Bo ZHOU, Yang HUANG & Xianbin WANG | |
| Coverage enhancement for 6G satellite-terrestrial integrated networks: performance metrics, constellation configuration and resource allocation | 130303(20) |
| Min SHENG, Di ZHOU, Weigang BAI, Junyu LIU, Haoran LI, Yan SHI & Jiandong LI | |
| Reconfiguring wireless environments via intelligent surfaces for 6G: reflection, modulation, and security | 130304(20) |
| Jindan XU, Chau YUEN, Chongwen HUANG, Naveed UL HASSAN, George C. ALEXANDROPOULOS, Marco DI RENZO & Mérourane DEBBAH | |
| Full-spectrum cell-free RAN for 6G systems: system design and experimental results | 130305(14) |
| Dongming WANG, Xiaohu YOU, Yongming HUANG, Wei XU, Jiamin LI, Pengcheng ZHU, Yanxiang JIANG, Yang CAO, Xinjiang XIA, Ziyang ZHANG, Qingji JIANG, Pan WANG, Dongjie LIU, Kang ZHENG, Mengting LOU, Jing JIN, Qixing WANG & Jiangzhou WANG | |
| 6G extreme connectivity via exploring spatiotemporal exchangeability..... | 130306(3) |
| Xiaohu YOU | |

RESEARCH PAPER

| | |
|---|-------------|
| BATON: symphony of random testing and concolic testing through machine learning and taint analysis | 132101(21) |
| Bihuan CHEN, Yang LIU, Xin PENG, Yijian WU & Shengchao QIN | |
| Safety guarantee for time-delay systems with disturbances | 132102(15) |
| Wenyou LIU, Yunjun BAI, Li JIAO & Naijun ZHAN | |
| Learning from crowds with robust support vector machines..... | 132103(17) |
| Wenjun YANG, Chaoqun LI & Liangxiao JIANG | |
| A convergence algorithm for graph co-regularized transfer learning..... | 132104(10) |
| Zuyuan YANG, Naiyao LIANG, Zhenni LI & Shengli XIE | |
| Class attention network for image recognition..... | 132105(13) |
| Gong CHENG, Pujian LAI, Decheng GAO & Junwei HAN | |
| Deep graph learning for spatially-varying indoor lighting prediction | 132106(15) |
| Jiayang BAI, Jie GUO, Chenchen WANG, Zhenyu CHEN, Zhen HE, Shan YANG, Piaopiao YU, Yan ZHANG & Yanwen GUO | |
| Siamese transformer with hierarchical concept embedding for fine-grained image recognition..... | 132107(16) |
| Yilin LYU, Liping JING, Jiaqi WANG, Mingzhe GUO, Xinyue WANG & Jian YU | |
| Asymptotical stability of continuous-time probabilistic logic networks based on transition rate..... | 132201(10) |
| Zhita LI, Yujian GUO & Weihua GUI | |
| Multi-constrained intelligent gliding guidance via optimal control and DQN | 132202(16) |
| Jianwen ZHU, Hao ZHANG, Sibo ZHAO & Weimin BAO | |
| Diverse terahertz wavefront manipulations empowered by the spatially interleaved metasurfaces | 132301(9) |
| Jitao LI, Zhen YUE, Jie LI, Chenglong ZHENG, Silei WANG, Mengyao LI, Yating ZHANG, Yan ZHANG & Jianquan YAO | |
| Robust online energy efficiency optimization for distributed multi-cell massive MIMO networks..... | 132302(14) |
| Li YOU, Yufei HUANG, Wen ZHONG, Wenjin WANG & Xiqi GAO | |
| Joint information transmission design for intelligent reflecting surface aided system with discrete phase shifts..... | 132303(10) |
| Qin TAO, Shuowen ZHANG, Caijun ZHONG & Yushu ZHANG | |
| Asynchronous multilevel bit-interleaved polar-coded modulation..... | 132304(10) |
| Yaoyue HU, Zhiwen PAN & Yongliang GUAN | |
| Reinforcement learning of non-additive joint steganographic embedding costs with attention mechanism | 132305(14) |
| Weixuan TANG, Bin LI, Weixiang LI, Yuangen WANG & Jiwu HUANG | |

LETTER

| | |
|--|-------------|
| Neural network equivalent model for highly efficient massive data classification | 139101(2) |
| Siquan YU, Zhi HAN, Yandong TANG & Chengdong WU | |
| DBKEM-AACS: a distributed key escrow model in blockchain with anonymous authentication and committee selection | 139102(2) |
| Axin XIANG, Hongfeng GAO, Youliang TIAN & Liang WAN | |
| A variational hardcut EM algorithm for the mixtures of Gaussian processes | 139103(2) |
| Tao LI & Jinwen MA | |
| Monodirectional evolutional symbiotic tissue P systems with channel states and cell division..... | 139104(2) |
| Bosheng SONG, Kenli LI, Xiangxiang ZENG, Mario J. PÉREZ-JIMÉNEZ & Claudio ZANDRON | |
| SMAF: a secure and makespan-aware framework for executing serverless workflows | 139105(2) |
| Shuai ZHANG, Yunfei GUO, Zehua GUO, Hongchao HU & Guozhen CHEN | |
| A revisited security evaluation of Simeck family ciphers against impossible differential cryptanalysis | 139106(2) |
| Kai ZHANG, Xuejia LAI, Lei WANG, Jie GUAN & Bin HU | |
| GE-semigroup method for controllability of stochastic descriptor linear systems..... | 139201(2) |
| Zhaoqiang GE | |
| Strong fault prognosability of partially-observed discrete event systems | 139202(2) |
| Yingrui ZHOU, Zengqiang CHEN, Zhongxin LIU & Zhipeng ZHANG | |
| Autonomous navigation of a multirotor robot in GNSS-denied environments for search and rescue | 139203(2) |
| Xiaolei HOU, Zhuoyi LI & Quan PAN | |
| Distributed estimation-based output consensus control of heterogeneous leader-follower systems with antagonistic interactions..... | 139204(2) |
| Yanzhi WU, Qingpeng LIANG, Yiyi ZHAO, Jiangping HU & Linying XIANG | |

Information for authors

SCIENCE CHINA Information Sciences (Sci China Inf Sci), cosponsored by the Chinese Academy of Sciences and the National Natural Science Foundation of China, and published by Science China Press, is committed to publishing high-quality, original results of both basic and applied research in all areas of information sciences, including computer science and technology, control science and engineering, information and communication engineering, microelectronics and solid state electronics, etc. *Sci China Inf Sci* is indexed in Science Citation Index Expanded (SCIE), Engineering Index (EI), Journal Citation Reports/Science Edition (JCR), Academic OneFile, Astrophysics Data System (ADS), CSA, Cabells, Current Contents/Engineering, Computing and Technology, DBLP, Digital Mathematics Registry, Earthquake Engineering Abstracts, Engineered Materials Abstracts, Gale, Google, INSPEC, Mathematical Reviews, OCLC, ProQuest, SCOPUS, Summon by Serial Solutions, VINITI. *Sci China Inf Sci* is published monthly in both print and electronic forms.

Authors are recommended to use *Science China's* online submission services. To submit a manuscript, please go to www.scichina.com, create an account to log in <http://mc03.manuscriptcentral.com/scis>, and follow the instructions there to upload text and image/table files.

All submissions will be reviewed by referees selected by the editorial board. The decision of acceptance or rejection of a manuscript is made by the editorial board based on the referees' reports. The entire review process may take 90 to 120 days, and the editorial office will inform the author of the decision as soon as the process is completed. If the editorial board fails to make a decision within 90 days, please contact the editorial office.

Authors should guarantee that their submitted manuscript has not been published before and has not been submitted elsewhere for print or electronic publication consideration. Submission of a manuscript is taken to imply that all the named authors are aware that they are listed as coauthors, and they have agreed on the submitted version of the paper. No change in the order of listed authors can be made without an agreement signed by all the authors.

Ethical responsibilities of authors: Authors should refrain from misrepresenting research results which could damage the trust in the journal and ultimately the entire scientific endeavour, and follow the COPE guidelines on how to deal with potential acts of misconduct.

Disclosure of potential conflict of interests: Authors must disclose all relationships or interests that could influence or bias the work. The corresponding author will include a summary statement in the text of the manuscript in a separate section before the reference list.

Once a manuscript is accepted, the authors should send a copyright transfer form signed by all authors to Science China Press. Authors of one published paper will be presented one sample copy. If more sample copies or offprints are required, please contact the managing editor and pay the extra fee. The full text opens free to domestic readers at www.scichina.com, and is available to overseas readers at link.springer.com.