

2022 IEEE East Asian School of Information Theory

Student Posters

2nd Aug

Mingyang Zhong, Honghao Shi, Zhiyong Luo, Congduan Li	A scheme of Polar Codes for Visible Light Communication Channel
Xianzhang Wu, Minquan Cheng, Congduan Li, Li Chen	Design of Coded Caching Schemes through Proper Orthogonal Arrays
Lijia Yang, Li Chen	Low-Latency Ordered Statistics Decoding of BCH Codes
Dan Song, Jinkai Ren, Lin Wang, Guanrong Chen	Common DP-LDPC Code Pair for Variable Channels
Guodong. Li, M. Ye, S. Hu	Adjacent-Bits-Swapped Polar codes: A New Code Construction to Speed Up Polarization
Yuan Li, Huazi Zhang, Rong Li, Jun Wang, Guiying Yan, Zhiming Ma	On the Weight Spectrum of Pre-transformed Polar Codes
Zicheng Ye, Yuan Li, Huazi Zhang, Rong Li, Jun Wang, Guiying Yan, Zhiming Ma	The Complete SC-invariant Affine Automorphisms of Polar Codes
Chih Wei Ling, Yanxiao Liu, Cheuk Ting Li	Weighted Parity-check Codes
Zhenggui Feng, Ling Liu	On the Adaptive Fano-SC-flip decoding of Polar Codes
Bolin Wu, Kai Niu, and Jincheng Dai	Bit Error Probability Analysis and Code Construction of Systematic Polar Codes
Wei Wang, Jincheng Dai, Kai Niu	Block Polarization HARQ for Polar-coded Modulation
Guodong Li, Min Ye, Sihuang Hu	All the Codeword Bits in Polar Codes Have the Same BER Under the SC Decoder
Chen Zhou , Min Zhu, Baoming Bai	Performance of Concatenated Zipper-RS Code
Wenhao Chen, Li Chen	Design and Decoding of U-UV Codes
Zuo-Xin Cai, Wenxin Liu, Li Chen	Design of Doped Polar Codes
Jiwei Liang, Lijia Yang, Li Chen	Partially Parallel Chase Decoding Algorithm for Reed-Solomon Codes
Geyang Wang, Qi Wang	On the Size Distribution of Levenshtein Balls with Radius One
Jianguo Zhao, Li Chen	On the subfield subcodes of Algebraic-geometric codes
Yanyan Dong, Shenghao Yang	On Optimal Finite-length Binary Block Codes of Size Four for Binary Symmetric Channels
Xianjie Zhao, Min Zhu, Baoming Bai	Soft Information Aided Chase-Pyndiah Decoding Algorithm of Zipper Code

3rd Aug

Jiajun Chen, Chi Wan Sung	Storage and Computation: a Tradeoff in Secure Distributed Computing
Wenxuan Lang	Un sourced Multiple Access
Yifan Feng	Analytical Distribution Design for Irregular Repetition Slotted ALOHA with Multi-packet Reception
Ganyu Qin, Jingjing Guo, Mingxiao Sun, Di Zhang	High Reliability and Low Delay Wireless Communications Based on Sparse Vector Coding
Lei Yuan, Nan Yang, Fang Fang, Zhiguo Ding	Performance Analysis of UAV-Assisted Short-packet Cooperative Communications
Qiuyu Du, Lei Yuan, Fang Fang	Performance Analysis of Full-duplex Cooperative NOMA Short-Packet Communications
Yao Liu, Min Li, An Liu, Jianmin Lu, Tony Xiao	Generalized Modeling and Fundamental Limits of Integrated Sensing and Communication
Zijian Zhang, Linglong Dai	Pattern-Division Multiplexing for Multi-user Continuous-Aperture MIMO
Yujun Huang, Bin Chen, Shu-Tao Xia	Compressive Sensing based Asymmetric Semantic Image Compression for Resource-constrained IoT system
Gangtao Xin	Lossless Compression Coding for Images with Soft Shaping Technique
Xuang Guang, Ruze Zhang	Outer Bound on Zero-error Function Compression over a Directed Acyclic Network
Jiachun Pan, Yonglong Li, Vincent Y. F. Tan	Asymptotic Nash Equilibrium for the Sequential Adversarial Hypothesis Testing Game
Zhongzhichao Wan, Jieao Zhu, Zijian Zhang, Linglong Dai, Chan-Byoung Chae	Capacity for Electromagnetic Information Theory Based on Spatial Correlation Analysis
Rina Su, Qifu T. Sun, Zhongshan Zhang	Completion Delay of Random Linear Network Coding in Full-duplex Relay Networks
Tiantian Zhu, Congduan Li, Yanqun Tang, Zhiyong Luo	On Latency Reductions in Vehicle-to-vehicle Networks by Random Linear Network Coding
Zhaopeng Xie, Yuping Qiu, Pingping Chen	Polar Coded Modulation Operated with Physical Network Coding
Cheng, Jiale, Liu, Nan, Kang, Wei, Yang Li	The Capacity of Symmetric Private Information Retrieval under Arbitrary Collusion and Eavesdropping Patterns
Vanlalruata Ralte	Distributed Sampling for Detection
Cheng Du, Yi Jiang	On the Existence Pattern of Golay Complementary Arrays
Yang Bai	Secure Network Function Computation: For Function Security

4th Aug

Siyuan Wang	Coded Alternating Least Squares for Straggler Mitigation in Distributed Recommendations
Chao Zhao, Chung Chan	On the Structure of New Collections of Dense Subgraphs and Strong Subgraphs
Xinyi Tong, Xiangxiang Xu, Shao-Lun Huang, Lizhong Zheng	A Mathematical Framework for Quantifying Transferability in Multi-source Transfer Learning
Jian Xu, Xinyi Tong, Shao-Lun Huang	Communication-efficient and Byzantine-robust Distributed Learning with Corrupted Workers
Haiyun He, Hanshu Yan and Vincent Y. F. Tan	Information-Theoretic Characterization of the Generalization Error for Iterative Semi-Supervised Learning
Jiyang Zhang, Fuyang Li, Xi Xiao, Tingyang Xu, Yu Rong, Yatao Bian	Hypergraph Convolutional Networks via Equivalence between Hypergraphs and Undirected Graph
Tianren Peng, Weida Wang, Shao-Lun Huang	A Mathematical Framework to Characterize the Dependency Structures in Multimodal Learning with Minimax Principle
Meilin Yang, Jian Xu, Yang Liu, Wenbo Ding	FedHAP: Federated Hashing with Global Prototypes for Cross-silo Retrieval
Yang Tan, Yang Li, Shao-Lun Huang	Transferability-Guided Cross-Domain Cross-Task Transfer Learning
Zihao Zhao, Menggen Luo, Wenbo Ding	Deep Leakage from Model
Ziyan Zheng, Xinyi Tong, Xinchun Yu, Xiangxiang Xu, Shao-Lun Huang	Multi-source Transfer Learning for Signal Detection over a Fading Channel with Co-channel Interference
Hengxi Zhang, Chengyue Lu, Huaze Tang, Xiaoli Wei, Le Liang, Ling Cheng, Wenbo Ding, Zhu Han	Mean-Field Approximation of Multi-Agent Reinforcement Learning for Resource Allocation Problem in Vehicular Networks
Yanjuan Yang, Weiming Yang, Lei Yuan	Deep Learning-Based Phase Noise Compensation in LDPC-Coded Wireless System
Chenhao Jin, Yinyan Wu, Congduan Li	Vehicle-Road Collaborative Path Planning Based on A*-assisted Deep Reinforcement Learning
Yuzhu Mao, Zihao Zhao, Meilin Yang, Le Liang, Yang Liu, Wenbo Ding, Tian Lan, Xiaoping Zhang	SAFARI: Sparsity-Enabled Federated Learning with Limited and Unreliable Communications
Zhaowei Han, Yuancheng Wang	Natural Language Querying for a Resume Search Engine
Yinyan Wu, Chenhao Jin, Congduan Li	READ-CSRL: Relation Entities Augmented Datasets for Conversational Semantic Role Labeling
Ruoqin Tang	Estimating Mutual Information by Neural Network