

2017 Index

IEEE Transactions on Emerging Topics in Computing

Vol. 5

This index covers all technical items — papers, correspondence, reviews, etc. — that appeared in this periodical during 2017, and items from previous years that were commented upon or corrected in 2017. Departments and other items may also be covered if they have been judged to have archival value.

The Author Index contains the primary entry for each item, listed under the first author's name. The primary entry includes the coauthors' names, the title of the paper or other item, and its location, specified by the publication abbreviation, year, month, and inclusive pagination. The Subject Index contains entries describing the item under all appropriate subject headings, plus the first author's name, the publication abbreviation, month, and year, and inclusive pages. Note that the item title is found only under the primary entry in the Author Index.

AUTHOR INDEX

A

- Abbasnejad, E.**, *see* Khoshkbarforousha, A., *TETC Jan. -March 2017 120-133*
- Abdelrasoul, M.**, *see* Hung, J., *TETC Jan. -March 2017 45-55*
- Abdou, A.**, Matrawy, A., and van Oorschot, P.C., Location Verification of Wireless Internet Clients: Evaluation and Improvements; *TETC Oct. -Dec. 2017 563-575*
- Acquaviva, A.**, *see* Nittala, R., *TETC Jan. -March 2017 95-107*
- Ahmadinia, A.**, *see* Watson, D., *TETC Oct. -Dec. 2017 551-562*
- Ali, S.S.**, *see* Mazumdar, B., *TETC July -Sept. 2017 317-328*

B

- Ban, Y.**, *see* Guo, J., *TETC Oct. -Dec. 2017 518-525*
- Barnawi, A.**, *see* Gu, L., *TETC Jan. -March 2017 108-119*
- Beckmann, K.**, Manem, H., and Cady, N.C., Performance Enhancement of a Time-Delay PUF Design by Utilizing Integrated Nanoscale ReRAM Devices; *TETC July -Sept. 2017 304-316*
- Bellizia, D.**, Bongiovanni, S., Monsurro, P., Scotti, G., and Trifiletti, A., Univariate Power Analysis Attacks Exploiting Static Dissipation of Nanometer CMOS VLSI Circuits for Cryptographic Applications; *TETC July -Sept. 2017 329-339*
- Bem, V.D.**, Marranghello, F.S., Reis, A.I., and Ribas, R.P., SAT-Based Formulation for Logical Capacity Evaluation of VIA-Configurable Structured ASIC; *TETC April -June 2017 247-259*
- Berral, J.L.**, Poggi, N., Carrera, D., Call, A., Reinauer, R., and Green, D., ALOJA: A Framework for Benchmarking and Predictive Analytics in Hadoop Deployments; *TETC Oct. -Dec. 2017 480-493*
- Bhunia, S.**, Chen, A., Sinanoglu, O., and M. Fung, J., Guest Editors Introduction: Security of Beyond CMOS Devices: Issues and Opportunities; *TETC July -Sept. 2017 302-303*
- Bi, Y.**, Shamsi, K., Yuan, J., Jin, Y., Niemier, M., and Hu, X.S., Tunnel FET Current Mode Logic for DPA-Resilient Circuit Designs; *TETC July -Sept. 2017 340-352*
- Bongiovanni, S.**, *see* Bellizia, D., *TETC July -Sept. 2017 329-339*
- Buggy, T.**, *see* Watson, D., *TETC Oct. -Dec. 2017 551-562*

C

- Cady, N.C.**, *see* Beckmann, K., *TETC July -Sept. 2017 304-316*
- Call, A.**, *see* Berral, J.L., *TETC Oct. -Dec. 2017 480-493*
- Callaghan, M.**, Savin-Baden, M., McShane, N., and Eguiluz, A.G., Mapping Learning and Game Mechanics for Serious Games Analysis in Engineering Education; *TETC Jan. -March 2017 77-83*
- Carrabina, J.**, Mashayekhi, M., PallarEs, J., and TerEs, L., Inkjet-Configurable Gate Arrays (IGA); *TETC April -June 2017 238-246*

- Carrera, D.**, *see* Berral, J.L., *TETC Oct. -Dec. 2017 480-493*
- Chakraborty, R.S.**, Pagliarini, S., Mathew, J., Rajendran, S.R., and Devi, M.N., A Flexible Online Checking Technique to Enhance Hardware Trojan Horse Detectability by Reliability Analysis; *TETC April -June 2017 260-270*
- Chan, C.**, *see* Chou, C., *TETC Jan. -March 2017 32-44*
- Chao, P.**, *see* Chou, C., *TETC Jan. -March 2017 32-44*
- Chen, A.**, *see* Bhunia, S., *TETC July -Sept. 2017 302-303*
- Chen, C.**, *see* Feng, Y., *TETC July -Sept. 2017 353-366*
- Chen, P.**, Qi, Y., and Hou, D., InvarNet-X: A Black-Box Invariant-Based Approach to Diagnosing Big Data Systems; *TETC Oct. -Dec. 2017 450-465*
- Chen, Z.**, *see* Chou, C., *TETC Jan. -March 2017 32-44*
- Chen, Z.**, *see* Guo, J., *TETC Oct. -Dec. 2017 518-525*
- Chih, W.**, *see* Chou, C., *TETC Jan. -March 2017 32-44*
- Choo, K.R.**, *see* Xu, Z., *TETC July -Sept. 2017 403-411*
- Chou, C.**, Tseng, S., Chih, W., Chen, Z., Chao, P., Lai, K.R., Chan, C., Yu, L., and Lin, Y., Open Student Models of Core Competencies at the Curriculum Level: Using Learning Analytics for Student Reflection; *TETC Jan. -March 2017 32-44*
- Copeland, L.D.**, and Gedeon, T.D., Tutorials in eLearning—How Presentation Affects Outcomes; *TETC Jan. -March 2017 20-31*
- Cotofana, S.D.**, *see* Voicu, G.R., *TETC April -June 2017 179-192*
- Cousins, D.B.**, Rohloff, K., and Sumorok, D., Designing an FPGA-Accelerated Homomorphic Encryption Co-Processor; *TETC April -June 2017 193-206*

D

- Dasilva, L.A.**, *see* Jourjon, G., *TETC Jan. -March 2017 7-19*
- De Micheli, G.**, *see* Tang, X., *TETC April -June 2017 210-222*
- DeMara, R.F.**, Platzner, M., and Ottavi, M., Guest Editorial: IEEE Transactions on Computers and IEEE Transactions on Emerging Topics in Computing Joint Special Section on Innovation in Reconfigurable Computing Fabrics from Devices to Architectures; *TETC April -June 2017 207-209*
- Demartini, C.**, *see* Laplante, P.A., *TETC Jan. -March 2017 5-6*
- Denazis, S.**, *see* Jourjon, G., *TETC Jan. -March 2017 7-19*
- Devi, M.N.**, *see* Chakraborty, R.S., *TETC April -June 2017 260-270*
- Domingue, J.**, *see* Jourjon, G., *TETC Jan. -March 2017 7-19*
- Dong, Q.**, *see* Tan, S., *TETC Oct. -Dec. 2017 506-517*

E

- Eguiluz, A.G.**, *see* Callaghan, M., *TETC Jan. -March 2017 77-83*

F

- Fan, D.**, *see* He, Z., *TETC April -June 2017 223-237*
- Fan, H.**, *see* Shi, Y., *TETC April -June 2017 271-285*
- Feng, Y.**, Stoleru, R., Chen, C., and Xie, G.G., A Routing-Protocol-Independent Caching Framework for Mobile Clouds; *TETC July -Sept. 2017 353-366*
- Fukazawa, Y.**, *see* Sunaga, Y., *TETC Jan. -March 2017 69-76*

G

- Gaillardon, P.**, *see* Tang, X., *TETC April -June 2017 210-222*
- Gaire, R.**, *see* Khoshkbarforousha, A., *TETC Jan. -March 2017 120-133*

- Gedeon, T.D.**, see Copeland, L.D., *TETC Jan. -March 2017 20-31*
Geraniou, E., see Gutierrez-Santos, S., *TETC Jan. -March 2017 56-68*
Ghosh, M., Wang, W., Holla, G., and Gupta, I., Morphus: Supporting Online Reconfigurations in Sharded NoSQL Systems; *TETC Oct. -Dec. 2017 466-479*
Gjessing, S., see Maharjan, S., *TETC Oct. -Dec. 2017 494-505*
Green, D., see Berral, J.L., *TETC Oct. -Dec. 2017 480-493*
Gu, L., Zeng, D., Guo, S., Barnawi, A., and Xiang, Y., Cost Efficient Resource Management in Fog Computing Supported Medical Cyber-Physical System; *TETC Jan. -March 2017 108-119*
Guizani, M., see Sun, Y., *TETC July -Sept. 2017 367-379*
Guo, J., Chen, Z., Ban, Y., and Kang, Y., Precise Enumeration of Circulating Tumor Cells Using Support Vector Machine Algorithm on a Microfluidic Sensor; *TETC Oct. -Dec. 2017 518-525*
Guo, S., see Huang, J., *TETC Jan. -March 2017 134-140*
Guo, S., see Gu, L., *TETC Jan. -March 2017 108-119*
Guo, S., see Li, P., *TETC July -Sept. 2017 438-448*
Guo, S., see Niu, J., *TETC July -Sept. 2017 412-424*
Gupta, I., see Ghosh, M., *TETC Oct. -Dec. 2017 466-479*
Gutierrez-Santos, S., Mavrikis, M., Geraniou, E., and Poulouvassilis, A., Similarity-Based Grouping to Support Teachers on Collaborative Activities in an Exploratory Mathematical Microworld; *TETC Jan. -March 2017 56-68*

H

- Hanyu, T.**, see Onizawa, N., *TETC April -June 2017 151-163*
He, W., see Hung, J., *TETC Jan. -March 2017 45-55*
He, Z., and Fan, D., Energy Efficient Reconfigurable Threshold Logic Circuit with Spintronic Devices; *TETC April -June 2017 223-237*
Hernandez-Leo, D., see Melero, J., *TETC Jan. -March 2017 84-94*
Holla, G., see Ghosh, M., *TETC Oct. -Dec. 2017 466-479*
Hou, D., see Chen, P., *TETC Oct. -Dec. 2017 450-465*
Hu, X.S., see Bi, Y., *TETC July -Sept. 2017 340-352*
Hua, K., see Huang, J., *TETC Jan. -March 2017 134-140*
Huang, C., Shao, C., Xu, S., and Zhou, H., The Social Internet of Thing (S-IOT)-Based Mobile Group Handoff Architecture and Schemes for Proximity Service; *TETC July -Sept. 2017 425-437*
Huang, C., and Kuo, T., Queuing-Theory-Based Models for Software Reliability Analysis and Management; *TETC Oct. -Dec. 2017 540-550*
Huang, D., see Tan, S., *TETC Oct. -Dec. 2017 506-517*
Huang, J., Li, X., Xing, C., Wang, W., Hua, K., and Guo, S., DTD: A Novel Double-Track Approach to Clone Detection for RFID-Enabled Supply Chains; *TETC Jan. -March 2017 134-140*
Hung, J., Wang, M.C., Wang, S., Abdelrasoul, M., Li, Y., and He, W., Identifying At-Risk Students for Early Interventions—A Time-Series Clustering Approach; *TETC Jan. -March 2017 45-55*

J

- Jha, N.K.**, see Mosenia, A., *TETC Oct. -Dec. 2017 586-602*
Jin, Y., see Bi, Y., *TETC July -Sept. 2017 340-352*
Jourjon, G., Marquez-Barja, J.M., Rakotoarivelo, T., Mikroyannidis, A., Lampropoulos, K., Denazis, S., Tranoris, C., Pareit, D., Domingue, J., Dasilva, L.A., and Ott, M., FORGE Toolkit: Leveraging Distributed Systems in eLearning Platforms; *TETC Jan. -March 2017 7-19*

K

- Kakchi, K.**, see Sunaga, Y., *TETC Jan. -March 2017 69-76*
Kang, Y., see Guo, J., *TETC Oct. -Dec. 2017 518-525*
Khasanvis, S., see Shi, J., *TETC April -June 2017 286-299*
Khoshkbarforousha, A., Ranjan, R., Gaire, R., Abbasnejad, E., Wang, L., and Zomaya, A.Y., Distribution Based Workload Modelling of Continuous Queries in Clouds; *TETC Jan. -March 2017 120-133*

- Kim, D.**, Kung, J., and Mukhopadhyay, S., A Power-Aware Digital Multilayer Perceptron Accelerator with On-Chip Training Based on Approximate Computing; *TETC April -June 2017 164-178*
Kung, J., see Kim, D., *TETC April -June 2017 164-178*
Kuo, T., see Huang, C., *TETC Oct. -Dec. 2017 540-550*

L

- Lai, K.R.**, see Chou, C., *TETC Jan. -March 2017 32-44*
Lamberti, F., see Laplante, P.A., *TETC Jan. -March 2017 5-6*
Lampropoulos, K., see Jourjon, G., *TETC Jan. -March 2017 7-19*
Laplante, P.A., Demartini, C., Lamberti, F., and Neill, C.J., Guest Editorial: Special Issue on Emerging Trends in Education – Part II; *TETC Jan. -March 2017 5-6*
Li, H., see Zhang, X., *TETC July -Sept. 2017 391-402*
Li, J., see Qiang, L., *TETC July -Sept. 2017 380-390*
Li, M., see Shi, J., *TETC April -June 2017 286-299*
Li, P., Miyazaki, T., Wang, K., Guo, S., and Zhuang, W., Vehicle-Assist Resilient Information and Network System for Disaster Management; *TETC July -Sept. 2017 438-448*
Li, X., see Huang, J., *TETC Jan. -March 2017 134-140*
Li, X., see Sun, Y., *TETC July -Sept. 2017 367-379*
Li, Y., see Hung, J., *TETC Jan. -March 2017 45-55*
Li, Y., see Zhang, X., *TETC July -Sept. 2017 391-402*
Lin, Y., see Chou, C., *TETC Jan. -March 2017 32-44*
Liu, Q., see Shi, Y., *TETC April -June 2017 271-285*
Liu, W., Swartzlander, E.E., and Oneill, M., Guest Editorial: Introduction to the Special Issue on Emerging Technologies and Designs for Application-Specific Computing; *TETC April -June 2017 148-150*
Lombardi, F., Message from the Editor-in-Chief; *TETC Jan. -March 2017 3-4*
Luo, X., see Xu, Z., *TETC July -Sept. 2017 403-411*
Lv, Z., see Xu, Z., *TETC July -Sept. 2017 403-411*

M

- M. Fung, J.**, see Bhunia, S., *TETC July -Sept. 2017 302-303*
Macii, E., see Nittala, R., *TETC Jan. -March 2017 95-107*
Maekawa, T., Yamashita, N., and Sakurai, Y., How Well Can a User's Location Privacy Preferences be Determined Without Using GPS Location Data?; *TETC Oct. -Dec. 2017 526-539*
Maharjan, S., Zhang, Y., Gjessing, S., and Tsang, D.H.K., User-Centric Demand Response Management in the Smart Grid With Multiple Providers; *TETC Oct. -Dec. 2017 494-505*
Manem, H., see Beckmann, K., *TETC July -Sept. 2017 304-316*
Marquez-Barja, J.M., see Jourjon, G., *TETC Jan. -March 2017 7-19*
Marranghello, F.S., see Bem, V.D., *TETC April -June 2017 247-259*
Mashayekhi, M., see Carrabina, J., *TETC April -June 2017 238-246*
Mathew, J., see Chakraborty, R.S., *TETC April -June 2017 260-270*
Matrawy, A., see Abdou, A., *TETC Oct. -Dec. 2017 563-575*
Mavrikis, M., see Gutierrez-Santos, S., *TETC Jan. -March 2017 56-68*
Mazumdar, B., Saeed, S.M., Ali, S.S., and Sinanoglu, O., Timing Attack and Countermeasure on NEMS Relay Based Design of Block Ciphers; *TETC July -Sept. 2017 317-328*
McShane, N., see Callaghan, M., *TETC Jan. -March 2017 77-83*
Mei, L., see Xu, Z., *TETC July -Sept. 2017 403-411*
Melero, J., and Hernandez-Leo, D., Design and Implementation of Location-Based Learning Games: Four Case Studies with "QuesTInSitu: The Game"; *TETC Jan. -March 2017 84-94*
Mikroyannidis, A., see Jourjon, G., *TETC Jan. -March 2017 7-19*
Miyazaki, T., see Li, P., *TETC July -Sept. 2017 438-448*
Mochizuki, A., see Onizawa, N., *TETC April -June 2017 151-163*
Monsurro, P., see Bellizia, D., *TETC July -Sept. 2017 329-339*
Morison, G., see Watson, D., *TETC Oct. -Dec. 2017 551-562*
Moritz, C.A., see Shi, J., *TETC April -June 2017 286-299*
Mosenia, A., and Jha, N.K., A Comprehensive Study of Security of Internet-of-Things; *TETC Oct. -Dec. 2017 586-602*
Mukhopadhyay, S., see Kim, D., *TETC April -June 2017 164-178*

N

- Neill, C.J.**, see Laplante, P.A., *TETC Jan. -March 2017 5-6*
Niemier, M., see Bi, Y., *TETC July -Sept. 2017 340-352*
Nittala, R., Acquaviva, A., and Macii, E., A Software Toolchain for Variability Awareness on Heterogenous Multicore Platforms; *TETC Jan. -March 2017 95-107*
Niu, J., Wang, S., Su, Y., and Guo, S., Temporal Factor-Aware Video Affective Analysis and Recommendation for Cyber-Based Social Media; *TETC July -Sept. 2017 412-424*

O

- Okubo, M.**, see Sunaga, Y., *TETC Jan. -March 2017 69-76*
O'Neill, M., see Liu, W., *TETC April -June 2017 148-150*
Onizawa, N., Mochizuki, A., Tamakoshi, A., and Hanyu, T., Sudden Power-Outage Resilient In-Processor Checkpointing for Energy-Harvesting Nonvolatile Processors; *TETC April -June 2017 151-163*
Ott, M., see Jourjon, G., *TETC Jan. -March 2017 7-19*
Ottavi, M., see DeMara, R.F., *TETC April -June 2017 207-209*

P

- Pagliarini, S.**, see Chakraborty, R.S., *TETC April -June 2017 260-270*
PallarEs, J., see Carrabina, J., *TETC April -June 2017 238-246*
Pareit, D., see Jourjon, G., *TETC Jan. -March 2017 7-19*
Platzner, M., see DeMara, R.F., *TETC April -June 2017 207-209*
Poggi, N., see Berral, J.L., *TETC Oct. -Dec. 2017 480-493*
Poulovassilis, A., see Gutierrez-Santos, S., *TETC Jan. -March 2017 56-68*

Q

- Qi, Y.**, see Chen, P., *TETC Oct. -Dec. 2017 450-465*
Qiang, L., Li, J., and Touati, C., A User Centered Multi-Objective Handoff Scheme for Hybrid 5G Environments; *TETC July -Sept. 2017 380-390*

R

- Rahman, M.**, see Shi, J., *TETC April -June 2017 286-299*
Rajendran, S.R., see Chakraborty, R.S., *TETC April -June 2017 260-270*
Rakotoarivelo, T., see Jourjon, G., *TETC Jan. -March 2017 7-19*
Ranjan, R., see Khoshkbarforousha, A., *TETC Jan. -March 2017 120-133*
Reinauer, R., see Berral, J.L., *TETC Oct. -Dec. 2017 480-493*
Reis, A.I., see Bem, V.D., *TETC April -June 2017 247-259*
Ribas, R.P., see Bem, V.D., *TETC April -June 2017 247-259*
Rohloff, K., see Cousins, D.B., *TETC April -June 2017 193-206*

S

- Saeed, S.M.**, see Mazumdar, B., *TETC July -Sept. 2017 317-328*
Sakurai, Y., see Maekawa, T., *TETC Oct. -Dec. 2017 526-539*
Savin-Baden, M., see Callaghan, M., *TETC Jan. -March 2017 77-83*
Schafer, B.C., see Veeranna, N., *TETC Oct. -Dec. 2017 576-585*
Scotti, G., see Bellizia, D., *TETC July -Sept. 2017 329-339*
Shamsi, K., see Bi, Y., *TETC July -Sept. 2017 340-352*
Shao, C., see Huang, C., *TETC July -Sept. 2017 425-437*
Shi, J., Li, M., Rahman, M., Khasanvis, S., and Moritz, C.A., NP-Dynamic Skybridge: A Fine-Grained 3D IC Technology with NP-Dynamic Logic; *TETC April -June 2017 286-299*
Shi, Y., Fan, H., and Liu, Q., An Obfuscatable Designated Verifier Signature Scheme; *TETC April -June 2017 271-285*

+ Check author entry for coauthors

- Sinanoglu, O.**, see Mazumdar, B., *TETC July -Sept. 2017 317-328*
Sinanoglu, O., see Bhunia, S., *TETC July -Sept. 2017 302-303*
Song, W., see Tan, S., *TETC Oct. -Dec. 2017 506-517*
Stoleru, R., see Feng, Y., *TETC July -Sept. 2017 353-366*
Su, Y., see Niu, J., *TETC July -Sept. 2017 412-424*
Sumorok, D., see Cousins, D.B., *TETC April -June 2017 193-206*
Sun, Y., Wu, T., Li, X., and Guizani, M., A Rule Verification System for Smart Buildings; *TETC July -Sept. 2017 367-379*
Sunaga, Y., Washizaki, H., Kakehi, K., Fukazawa, Y., Yamato, S., and Okubo, M., Relation Between Combinations of Personal Characteristic Types and Educational Effectiveness for a Controlled Project-Based Learning Course; *TETC Jan. -March 2017 69-76*
Swartzlander, E.E., see Liu, W., *TETC April -June 2017 148-150*

T

- Tamakoshi, A.**, see Onizawa, N., *TETC April -June 2017 151-163*
Tan, S., Song, W., Huang, D., Dong, Q., and Tong, L., Distributed Software Emulator for Cyber-Physical Analysis in Smart Grid; *TETC Oct. -Dec. 2017 506-517*
Tang, X., De Micheli, G., and Gaillardon, P., A High-Performance FPGA Architecture Using One-Level RRAM-Based Multiplexers; *TETC April -June 2017 210-222*
TerEs, L., see Carrabina, J., *TETC April -June 2017 238-246*
Tong, L., see Tan, S., *TETC Oct. -Dec. 2017 506-517*
Touati, C., see Qiang, L., *TETC July -Sept. 2017 380-390*
Tranoris, C., see Jourjon, G., *TETC Jan. -March 2017 7-19*
Trifiletti, A., see Bellizia, D., *TETC July -Sept. 2017 329-339*
Tsang, D.H.K., see Maharjan, S., *TETC Oct. -Dec. 2017 494-505*
Tseng, S., see Chou, C., *TETC Jan. -March 2017 32-44*

V

- van Oorschot, P.C.**, see Abdou, A., *TETC Oct. -Dec. 2017 563-575*
Veeranna, N., and Schafer, B.C., Hardware Trojan Detection in Behavioral Intellectual Properties (IP's) Using Property Checking Techniques; *TETC Oct. -Dec. 2017 576-585*
Voicu, G.R., and Cotofana, S.D., High-Performance, Cost-Effective 3D Stacked Wide-Operand Adders; *TETC April -June 2017 179-192*

W

- Wang, D.**, see Zhang, X., *TETC July -Sept. 2017 391-402*
Wang, K., see Li, P., *TETC July -Sept. 2017 438-448*
Wang, L., see Khoshkbarforousha, A., *TETC Jan. -March 2017 120-133*
Wang, M.C., see Hung, J., *TETC Jan. -March 2017 45-55*
Wang, S., see Hung, J., *TETC Jan. -March 2017 45-55*
Wang, S., see Zhang, X., *TETC July -Sept. 2017 391-402*
Wang, S., see Niu, J., *TETC July -Sept. 2017 412-424*
Wang, W., see Huang, J., *TETC Jan. -March 2017 134-140*
Wang, W., see Ghosh, M., *TETC Oct. -Dec. 2017 466-479*
Washizaki, H., see Sunaga, Y., *TETC Jan. -March 2017 69-76*
Watson, D., Morison, G., Ahmadiania, A., and Buggy, T., A Novel Hardware Accelerator for Embedded Object Detection Applications; *TETC Oct. -Dec. 2017 551-562*
Wei, X., see Xu, Z., *TETC July -Sept. 2017 403-411*
Wu, T., see Sun, Y., *TETC July -Sept. 2017 367-379*

X

- Xiang, Y.**, see Gu, L., *TETC Jan. -March 2017 108-119*
Xie, G.G., see Feng, Y., *TETC July -Sept. 2017 353-366*
Xing, C., see Huang, J., *TETC Jan. -March 2017 134-140*
Xu, S., see Huang, C., *TETC July -Sept. 2017 425-437*
Xu, Z., Yen, N.Y., Zhang, H., Wei, X., Lv, Z., Choo, K.R., Mei, L., and Luo, X., Social Sensors Based Online Attention Computing of Public Safety Events; *TETC July -Sept. 2017 403-411*

Y

- Yamashita, N.**, see Maekawa, T., *TETC Oct. -Dec. 2017 526-539*
Yamato, S., see Sunaga, Y., *TETC Jan. -March 2017 69-76*
Yen, N.Y., see Xu, Z., *TETC July -Sept. 2017 403-411*
Yu, L., see Chou, C., *TETC Jan. -March 2017 32-44*
Yuan, J., see Bi, Y., *TETC July -Sept. 2017 340-352*

Z

- Zeng, D.**, see Gu, L., *TETC Jan. -March 2017 108-119*
Zhang, H., see Xu, Z., *TETC July -Sept. 2017 403-411*
Zhang, J., see Zhang, X., *TETC July -Sept. 2017 391-402*
Zhang, X., Li, Y., Zhang, Y., Zhang, J., Li, H., Wang, S., and Wang, D., Information Caching Strategy for Cyber Social Computing Based Wireless Networks; *TETC July -Sept. 2017 391-402*
Zhang, Y., see Zhang, X., *TETC July -Sept. 2017 391-402*
Zhang, Y., see Maharjan, S., *TETC Oct. -Dec. 2017 494-505*
Zhou, H., see Huang, C., *TETC July -Sept. 2017 425-437*
Zhuang, W., see Li, P., *TETC July -Sept. 2017 438-448*
Zomaya, A.Y., see Khoshkbarforousha, A., *TETC Jan. -March 2017 120-133*

SUBJECT INDEX

Numeric

5G mobile communication

- A User Centered Multi-Objective Handoff Scheme for Hybrid 5G Environments. *Qiang, L.*, +, *TETC July -Sept. 2017 380-390*
 Information Caching Strategy for Cyber Social Computing Based Wireless Networks. *Zhang, X.*, +, *TETC July -Sept. 2017 391-402*

A

Adders

- High-Performance, Cost-Effective 3D Stacked Wide-Operand Adders. *Voicu, G.R.*, +, *TETC April -June 2017 179-192*

Analytical models

- ALOJA: A Framework for Benchmarking and Predictive Analytics in Hadoop Deployments. *Berral, J.L.*, +, *TETC Oct. -Dec. 2017 480-493*
 Distributed Software Emulator for Cyber-Physical Analysis in Smart Grid. *Tan, S.*, +, *TETC Oct. -Dec. 2017 506-517*
 Queuing-Theory-Based Models for Software Reliability Analysis and Management. *Huang, C.*, +, *TETC Oct. -Dec. 2017 540-550*

Apertures

- Precise Enumeration of Circulating Tumor Cells Using Support Vector Machine Algorithm on a Microfluidic Sensor. *Guo, J.*, +, *TETC Oct. -Dec. 2017 518-525*

Application specific integrated circuits

- SAT-Based Formulation for Logical Capacity Evaluation of VIA-Configurable Structured ASIC. *Bem, V.D.*, +, *TETC April -June 2017 247-259*

Application specific processors

- Guest Editorial: Introduction to the Special Issue on Emerging Technologies and Designs for Application-Specific Computing. *Liu, W.*, +, *TETC April -June 2017 148-150*

Approximation theory

- A Power-Aware Digital Multilayer Perceptron Accelerator with On-Chip Training Based on Approximate Computing. *Kim, D.*, +, *TETC April -June 2017 164-178*

B

Bandwidth

- Precise Enumeration of Circulating Tumor Cells Using Support Vector Machine Algorithm on a Microfluidic Sensor. *Guo, J.*, +, *TETC Oct. -Dec. 2017 518-525*

+ Check author entry for coauthors

Benchmark testing

- ALOJA: A Framework for Benchmarking and Predictive Analytics in Hadoop Deployments. *Berral, J.L.*, +, *TETC Oct. -Dec. 2017 480-493*

Big Data

- InvarNet-X: A Black-Box Invariant-Based Approach to Diagnosing Big Data Systems. *Chen, P.*, +, *TETC Oct. -Dec. 2017 450-465*

- ALOJA: A Framework for Benchmarking and Predictive Analytics in Hadoop Deployments. *Berral, J.L.*, +, *TETC Oct. -Dec. 2017 480-493*

Binary decision diagrams

- Timing Attack and Countermeasure on NEMS Relay Based Design of Block Ciphers. *Mazumdar, B.*, +, *TETC July -Sept. 2017 317-328*

Biological system modeling

- A Comprehensive Study of Security of Internet-of-Things. *Mosenia, A.*, +, *TETC Oct. -Dec. 2017 586-602*

Bipartite graph

- Morphus: Supporting Online Reconfigurations in Sharded NoSQL Systems. *Ghosh, M.*, +, *TETC Oct. -Dec. 2017 466-479*

Boolean functions

- SAT-Based Formulation for Logical Capacity Evaluation of VIA-Configurable Structured ASIC. *Bem, V.D.*, +, *TETC April -June 2017 247-259*

Building management systems

- A Rule Verification System for Smart Buildings. *Sun, Y.*, +, *TETC July -Sept. 2017 367-379*

C

Cells (biology)

- Precise Enumeration of Circulating Tumor Cells Using Support Vector Machine Algorithm on a Microfluidic Sensor. *Guo, J.*, +, *TETC Oct. -Dec. 2017 518-525*

Circuit reliability

- A Flexible Online Checking Technique to Enhance Hardware Trojan Horse Detectability by Reliability Analysis. *Chakraborty, R.S.*, +, *TETC April -June 2017 260-270*

Clocks

- NP-Dynamic Skybridge: A Fine-Grained 3D IC Technology with NP-Dynamic Logic. *Shi, J.*, +, *TETC April -June 2017 286-299*

Cloud computing

- A Routing-Protocol-Independent Caching Framework for Mobile Clouds. *Feng, Y.*, +, *TETC July -Sept. 2017 353-366*
 Cost Efficient Resource Management in Fog Computing Supported Medical Cyber-Physical System. *Gu, L.*, +, *TETC Jan. -March 2017 108-119*
 Distribution Based Workload Modelling of Continuous Queries in Clouds. *Khoshkbarforousha, A.*, +, *TETC Jan. -March 2017 120-133*

Clustering algorithms

- Morphus: Supporting Online Reconfigurations in Sharded NoSQL Systems. *Ghosh, M.*, +, *TETC Oct. -Dec. 2017 466-479*

CMOS integrated circuits

- Performance Enhancement of a Time-Delay PUF Design by Utilizing Integrated Nanoscale ReRAM Devices. *Beckmann, K.*, +, *TETC July -Sept. 2017 304-316*
 Timing Attack and Countermeasure on NEMS Relay Based Design of Block Ciphers. *Mazumdar, B.*, +, *TETC July -Sept. 2017 317-328*

CMOS logic circuits

- Energy Efficient Reconfigurable Threshold Logic Circuit with Spintronic Devices. *He, Z.*, +, *TETC April -June 2017 223-237*
 NP-Dynamic Skybridge: A Fine-Grained 3D IC Technology with NP-Dynamic Logic. *Shi, J.*, +, *TETC April -June 2017 286-299*
 Tunnel FET Current Mode Logic for DPA-Resilient Circuit Designs. *Bi, Y.*, +, *TETC July -Sept. 2017 340-352*
 Univariate Power Analysis Attacks Exploiting Static Dissipation of Nanometer CMOS VLSI Circuits for Cryptographic Applications. *Belizia, D.*, +, *TETC July -Sept. 2017 329-339*

CMOS technology

- Guest Editors Introduction: Security of Beyond CMOS Devices: Issues and Opportunities. *Bhunia, S.*, +, *TETC July -Sept. 2017 302-303*

Communication system security

- Location Verification of Wireless Internet Clients: Evaluation and Improvements. *Abdou, A.*, +, *TETC Oct. -Dec. 2017 563-575*

Companies

- User-Centric Demand Response Management in the Smart Grid With Multiple Providers. *Maharjan, S.*, +, *TETC Oct. -Dec. 2017 494-505*

Computability

SAT-Based Formulation for Logical Capacity Evaluation of VIA-Configurable Structured ASIC. *Bem, V.D.*, +, *TETC April -June 2017 247-259*

Computational complexity

Cost Efficient Resource Management in Fog Computing Supported Medical Cyber-Physical System. *Gu, L.*, +, *TETC Jan. -March 2017 108-119*

Computational modeling

A Comprehensive Study of Security of Internet-of-Things. *Mosenia, A.*, +, *TETC Oct. -Dec. 2017 586-602*

Distributed Software Emulator for Cyber-Physical Analysis in Smart Grid. *Tan, S.*, +, *TETC Oct. -Dec. 2017 506-517*

Guest Editors Introduction: Security of Beyond CMOS Devices: Issues and Opportunities. *Bhunia, S.*, +, *TETC July -Sept. 2017 302-303*

Queueing-Theory-Based Models for Software Reliability Analysis and Management. *Huang, C.*, +, *TETC Oct. -Dec. 2017 540-550*

Computer aided instruction

Design and Implementation of Location-Based Learning Games: Four Case Studies with "QuesTInSitu: The Game". *Melero, J.*, +, *TETC Jan. -March 2017 84-94*

FORGE Toolkit: Leveraging Distributed Systems in eLearning Platforms. *Jourjon, G.*, +, *TETC Jan. -March 2017 7-19*

Identifying At-Risk Students for Early Interventions—A Time-Series Clustering Approach. *Hung, J.*, +, *TETC Jan. -March 2017 45-55*

Mapping Learning and Game Mechanics for Serious Games Analysis in Engineering Education. *Callaghan, M.*, +, *TETC Jan. -March 2017 77-83*

Tutorials in eLearning—How Presentation Affects Outcomes. *Copeland, L.D.*, +, *TETC Jan. -March 2017 20-31*

Computer applications

Guest Editorial: Introduction to the Special Issue on Emerging Technologies and Designs for Application-Specific Computing. *Liu, W.*, +, *TETC April -June 2017 148-150*

Computer architecture

Guest Editorial: IEEE Transactions on Computers and IEEE Transactions on Emerging Topics in Computing Joint Special Section on Innovation in Reconfigurable Computing Fabrics from Devices to Architectures. *DeMara, R.F.*, +, *TETC April -June 2017 207-209*

Guest Editorial: Introduction to the Special Issue on Emerging Technologies and Designs for Application-Specific Computing. *Liu, W.*, +, *TETC April -June 2017 148-150*

Computer centers

Cost Efficient Resource Management in Fog Computing Supported Medical Cyber-Physical System. *Gu, L.*, +, *TETC Jan. -March 2017 108-119*

Computer games

Design and Implementation of Location-Based Learning Games: Four Case Studies with "QuesTInSitu: The Game". *Melero, J.*, +, *TETC Jan. -March 2017 84-94*

Computer science education

FORGE Toolkit: Leveraging Distributed Systems in eLearning Platforms. *Jourjon, G.*, +, *TETC Jan. -March 2017 7-19*

Relation Between Combinations of Personal Characteristic Types and Educational Effectiveness for a Controlled Project-Based Learning Course. *Sunaga, Y.*, +, *TETC Jan. -March 2017 69-76*

Continuing education

FORGE Toolkit: Leveraging Distributed Systems in eLearning Platforms. *Jourjon, G.*, +, *TETC Jan. -March 2017 7-19*

Coprocessors

Designing an FPGA-Accelerated Homomorphic Encryption Co-Processor. *Cousins, D.B.*, +, *TETC April -June 2017 193-206*

Correlation

InvarNet-X: A Black-Box Invariant-Based Approach to Diagnosing Big Data Systems. *Chen, P.*, +, *TETC Oct. -Dec. 2017 450-465*

Cost function

User-Centric Demand Response Management in the Smart Grid With Multiple Providers. *Maharjan, S.*, +, *TETC Oct. -Dec. 2017 494-505*

Cryptography

Designing an FPGA-Accelerated Homomorphic Encryption Co-Processor. *Cousins, D.B.*, +, *TETC April -June 2017 193-206*

Guest Editorial: Introduction to the Special Issue on Emerging Technologies and Designs for Application-Specific Computing. *Liu, W.*, +, *TETC April -June 2017 148-150*

Hardware Trojan Detection in Behavioral Intellectual Properties (IP's) Using Property Checking Techniques. *Veeranna, N.*, +, *TETC Oct. -Dec. 2017 576-585*

High-Performance, Cost-Effective 3D Stacked Wide-Operand Adders. *Voicu, G.R.*, +, *TETC April -June 2017 179-192*

Timing Attack and Countermeasure on NEMS Relay Based Design of Block Ciphers. *Mazumdar, B.*, +, *TETC July -Sept. 2017 317-328*

Univariate Power Analysis Attacks Exploiting Static Dissipation of Nanometer CMOS VLSI Circuits for Cryptographic Applications. *Bellizia, D.*, +, *TETC July -Sept. 2017 329-339*

Cyber-physical systems

Cost Efficient Resource Management in Fog Computing Supported Medical Cyber-Physical System. *Gu, L.*, +, *TETC Jan. -March 2017 108-119*

D**Data analysis**

Open Student Models of Core Competencies at the Curriculum Level: Using Learning Analytics for Student Reflection. *Chou, C.*, +, *TETC Jan. -March 2017 32-44*

Vehicle-Assist Resilient Information and Network System for Disaster Management. *Li, P.*, +, *TETC July -Sept. 2017 438-448*

Data mining

Morphus: Supporting Online Reconfigurations in Sharded NoSQL Systems. *Ghosh, M.*, +, *TETC Oct. -Dec. 2017 466-479*

Data models

InvarNet-X: A Black-Box Invariant-Based Approach to Diagnosing Big Data Systems. *Chen, P.*, +, *TETC Oct. -Dec. 2017 450-465*

Data privacy

An Obfuscatable Designated Verifier Signature Scheme. *Shi, Y.*, +, *TETC April -June 2017 271-285*

How Well Can a User's Location Privacy Preferences be Determined Without Using GPS Location Data?. *Maekawa, T.*, +, *TETC Oct. -Dec. 2017 526-539*

Databases

InvarNet-X: A Black-Box Invariant-Based Approach to Diagnosing Big Data Systems. *Chen, P.*, +, *TETC Oct. -Dec. 2017 450-465*

Morphus: Supporting Online Reconfigurations in Sharded NoSQL Systems. *Ghosh, M.*, +, *TETC Oct. -Dec. 2017 466-479*

Delays

A High-Performance FPGA Architecture Using One-Level RRAM-Based Multiplexers. *Tang, X.*, +, *TETC April -June 2017 210-222*

High-Performance, Cost-Effective 3D Stacked Wide-Operand Adders. *Voicu, G.R.*, +, *TETC April -June 2017 179-192*

Location Verification of Wireless Internet Clients: Evaluation and Improvements. *Abdou, A.*, +, *TETC Oct. -Dec. 2017 563-575*

Digital signatures

An Obfuscatable Designated Verifier Signature Scheme. *Shi, Y.*, +, *TETC April -June 2017 271-285*

Distributed databases

A Novel Hardware Accelerator for Embedded Object Detection Applications. *Watson, D.*, +, *TETC Oct. -Dec. 2017 551-562*

E**Education**

Guest Editorial: Special Issue on Emerging Trends in Education – Part II. *Laplante, P.A.*, +, *TETC Jan. -March 2017 5-6*

Educational administrative data processing

Open Student Models of Core Competencies at the Curriculum Level: Using Learning Analytics for Student Reflection. *Chou, C.*, +, *TETC Jan. -March 2017 32-44*

Similarity-Based Grouping to Support Teachers on Collaborative Activities in an Exploratory Mathematical Microworld. *Gutierrez-Santos, S.*, +, *TETC Jan. -March 2017 56-68*

Educational courses

FORGE Toolkit: Leveraging Distributed Systems in eLearning Platforms. *Jourjon, G.*, +, *TETC Jan. -March 2017 7-19*

Open Student Models of Core Competencies at the Curriculum Level: Using Learning Analytics for Student Reflection. *Chou, C.*, +, *TETC Jan. -March 2017 32-44*

Relation Between Combinations of Personal Characteristic Types and Educational Effectiveness for a Controlled Project-Based Learning Course. *Sunaga, Y.*, +, *TETC Jan. -March 2017 69-76*

Educational institutions

- FORGE Toolkit: Leveraging Distributed Systems in eLearning Platforms. *Jourjon, G.*, +, *TETC Jan. -March 2017 7-19*
- Relation Between Combinations of Personal Characteristic Types and Educational Effectiveness for a Controlled Project-Based Learning Course. *Sunaga, Y.*, +, *TETC Jan. -March 2017 69-76*

Electricity

- User-Centric Demand Response Management in the Smart Grid With Multiple Providers. *Maharjan, S.*, +, *TETC Oct. -Dec. 2017 494-505*

Electronic engineering computing

- Mapping Learning and Game Mechanics for Serious Games Analysis in Engineering Education. *Callaghan, M.*, +, *TETC Jan. -March 2017 77-83*

Electronic engineering education

- Mapping Learning and Game Mechanics for Serious Games Analysis in Engineering Education. *Callaghan, M.*, +, *TETC Jan. -March 2017 77-83*

Embedded systems

- Tunnel FET Current Mode Logic for DPA-Resilient Circuit Designs. *Bi, Y.*, +, *TETC July -Sept. 2017 340-352*

Emergency management

- Vehicle-Assist Resilient Information and Network System for Disaster Management. *Li, P.*, +, *TETC July -Sept. 2017 438-448*

Emulation

- Distributed Software Emulator for Cyber-Physical Analysis in Smart Grid. *Tan, S.*, +, *TETC Oct. -Dec. 2017 506-517*

Energy conservation

- Energy Efficient Reconfigurable Threshold Logic Circuit with Spintronic Devices. *He, Z.*, +, *TETC April -June 2017 223-237*

Energy harvesting

- Sudden Power-Outage Resilient In-Processor Checkpointing for Energy-Harvesting Nonvolatile Processors. *Onizawa, N.*, +, *TETC April -June 2017 151-163*

Engineering education

- Guest Editorial: Special Issue on Emerging Trends in Education – Part II. *Laplante, P.A.*, +, *TETC Jan. -March 2017 5-6*

F**Fault detection**

- Queueing-Theory-Based Models for Software Reliability Analysis and Management. *Huang, C.*, +, *TETC Oct. -Dec. 2017 540-550*

Fault tolerance

- Morphus: Supporting Online Reconfigurations in Sharded NoSQL Systems. *Ghosh, M.*, +, *TETC Oct. -Dec. 2017 466-479*

Feature extraction

- How Well Can a User's Location Privacy Preferences be Determined Without Using GPS Location Data?. *Maekawa, T.*, +, *TETC Oct. -Dec. 2017 526-539*

Field effect transistors

- Tunnel FET Current Mode Logic for DPA-Resilient Circuit Designs. *Bi, Y.*, +, *TETC July -Sept. 2017 340-352*

Field programmable gate arrays

- A High-Performance FPGA Architecture Using One-Level RRAM-Based Multiplexers. *Tang, X.*, +, *TETC April -June 2017 210-222*
- Designing an FPGA-Accelerated Homomorphic Encryption Co-Processor. *Cousins, D.B.*, +, *TETC April -June 2017 193-206*
- Energy Efficient Reconfigurable Threshold Logic Circuit with Spintronic Devices. *He, Z.*, +, *TETC April -June 2017 223-237*
- Guest Editorial: IEEE Transactions on Computers and IEEE Transactions on Emerging Topics in Computing Joint Special Section on Innovation in Reconfigurable Computing Fabrics from Devices to Architectures. *DeMara, R.F.*, +, *TETC April -June 2017 207-209*

Flip-flops

- Sudden Power-Outage Resilient In-Processor Checkpointing for Energy-Harvesting Nonvolatile Processors. *Onizawa, N.*, +, *TETC April -June 2017 151-163*

G**Games**

- User-Centric Demand Response Management in the Smart Grid With Multiple Providers. *Maharjan, S.*, +, *TETC Oct. -Dec. 2017 494-505*

Gaussian distribution

- Location Verification of Wireless Internet Clients: Evaluation and Improvements. *Abdou, A.*, +, *TETC Oct. -Dec. 2017 563-575*

Global Positioning System

- How Well Can a User's Location Privacy Preferences be Determined Without Using GPS Location Data?. *Maekawa, T.*, +, *TETC Oct. -Dec. 2017 526-539*

Graphical user interfaces

- Distributed Software Emulator for Cyber-Physical Analysis in Smart Grid. *Tan, S.*, +, *TETC Oct. -Dec. 2017 506-517*

Groupware

- Similarity-Based Grouping to Support Teachers on Collaborative Activities in an Exploratory Mathematical Microworld. *Gutierrez-Santos, S.*, +, *TETC Jan. -March 2017 56-68*

H**Hardware**

- A Novel Hardware Accelerator for Embedded Object Detection Applications. *Watson, D.*, +, *TETC Oct. -Dec. 2017 551-562*
- ALOJA: A Framework for Benchmarking and Predictive Analytics in Hadoop Deployments. *Berral, J.L.*, +, *TETC Oct. -Dec. 2017 480-493*
- Distributed Software Emulator for Cyber-Physical Analysis in Smart Grid. *Tan, S.*, +, *TETC Oct. -Dec. 2017 506-517*
- Hardware Trojan Detection in Behavioral Intellectual Properties (IP's) Using Property Checking Techniques. *Veeranna, N.*, +, *TETC Oct. -Dec. 2017 576-585*

Health care

- Cost Efficient Resource Management in Fog Computing Supported Medical Cyber-Physical System. *Gu, L.*, +, *TETC Jan. -March 2017 108-119*

Human computer interaction

- Tutorials in eLearning—How Presentation Affects Outcomes. *Copeland, L.D.*, +, *TETC Jan. -March 2017 20-31*

I**IEEE 802.11 Standards**

- How Well Can a User's Location Privacy Preferences be Determined Without Using GPS Location Data?. *Maekawa, T.*, +, *TETC Oct. -Dec. 2017 526-539*

IEEE publishing

- 2016 Reviewers List. *TETC Jan. -March 2017 141-145*
- 2017 Reviewers List. *TETC Oct. -Dec. 2017 603-606*

Impedance

- Precise Enumeration of Circulating Tumor Cells Using Support Vector Machine Algorithm on a Microfluidic Sensor. *Guo, J.*, +, *TETC Oct. -Dec. 2017 518-525*

Inference mechanisms

- A Power-Aware Digital Multilayer Perceptron Accelerator with On-Chip Training Based on Approximate Computing. *Kim, D.*, +, *TETC April -June 2017 164-178*

Ink jet printing

- Inkjet-Configurable Gate Arrays (IGA). *Carrabina, J.*, +, *TETC April -June 2017 238-246*

Integer programming

- Cost Efficient Resource Management in Fog Computing Supported Medical Cyber-Physical System. *Gu, L.*, +, *TETC Jan. -March 2017 108-119*

Integrated circuit modeling

- Guest Editors Introduction: Security of Beyond CMOS Devices: Issues and Opportunities. *Bhunia, S.*, +, *TETC July -Sept. 2017 302-303*

Integrated circuit reliability

- Performance Enhancement of a Time-Delay PUF Design by Utilizing Integrated Nanoscale ReRAM Devices. *Beckmann, K.*, +, *TETC July -Sept. 2017 304-316*

Internet

- Location Verification of Wireless Internet Clients: Evaluation and Improvements. *Abdou, A.*, +, *TETC Oct. -Dec. 2017 563-575*

Internet of Things

- A Comprehensive Study of Security of Internet-of-Things. *Mosenia, A.*, +, *TETC Oct. -Dec. 2017 586-602*

- A Rule Verification System for Smart Buildings. *Sun, Y.*, +, *TETC July -Sept. 2017 367-379*
- The Social Internet of Thing (S-IOT)-Based Mobile Group Handoff Architecture and Schemes for Proximity Service. *Huang, C.*, +, *TETC July -Sept. 2017 425-437*

IP networks

- Hardware Trojan Detection in Behavioral Intellectual Properties (IP's) Using Property Checking Techniques. *Veeranna, N.*, +, *TETC Oct. -Dec. 2017 576-585*

Iterative methods

- A Power-Aware Digital Multilayer Perceptron Accelerator with On-Chip Training Based on Approximate Computing. *Kim, D.*, +, *TETC April -June 2017 164-178*

L**Learning (artificial intelligence)**

- A Power-Aware Digital Multilayer Perceptron Accelerator with On-Chip Training Based on Approximate Computing. *Kim, D.*, +, *TETC April -June 2017 164-178*

Libraries

- A Novel Hardware Accelerator for Embedded Object Detection Applications. *Watson, D.*, +, *TETC Oct. -Dec. 2017 551-562*

Licenses

- InvarNet-X*: A Black-Box Invariant-Based Approach to Diagnosing Big Data Systems. *Chen, P.*, +, *TETC Oct. -Dec. 2017 450-465*
- ALOJA: A Framework for Benchmarking and Predictive Analytics in Hadoop Deployments. *Berral, J.L.*, +, *TETC Oct. -Dec. 2017 480-493*

Linear programming

- Cost Efficient Resource Management in Fog Computing Supported Medical Cyber-Physical System. *Gu, L.*, +, *TETC Jan. -March 2017 108-119*

Local area networks

- Designing an FPGA-Accelerated Homomorphic Encryption Co-Processor. *Cousins, D.B.*, +, *TETC April -June 2017 193-206*

Logic arrays

- Inkjet-Configurable Gate Arrays (IGA). *Carrabina, J.*, +, *TETC April -June 2017 238-246*

Logic design

- Designing an FPGA-Accelerated Homomorphic Encryption Co-Processor. *Cousins, D.B.*, +, *TETC April -June 2017 193-206*
- Energy Efficient Reconfigurable Threshold Logic Circuit with Spintronic Devices. *He, Z.*, +, *TETC April -June 2017 223-237*
- NP-Dynamic Skybridge: A Fine-Grained 3D IC Technology with NP-Dynamic Logic. *Shi, J.*, +, *TETC April -June 2017 286-299*
- Tunnel FET Current Mode Logic for DPA-Resilient Circuit Designs. *Bi, Y.*, +, *TETC July -Sept. 2017 340-352*

Logic gates

- A Flexible Online Checking Technique to Enhance Hardware Trojan Horse Detectability by Reliability Analysis. *Chakraborty, R.S.*, +, *TETC April -June 2017 260-270*
- Guest Editorial: IEEE Transactions on Computers and IEEE Transactions on Emerging Topics in Computing Joint Special Section on Innovation in Reconfigurable Computing Fabrics from Devices to Architectures. *DeMara, R.F.*, +, *TETC April -June 2017 207-209*
- Univariate Power Analysis Attacks Exploiting Static Dissipation of Nanometer CMOS VLSI Circuits for Cryptographic Applications. *Bellizia, D.*, +, *TETC July -Sept. 2017 329-339*

Low-power electronics

- Performance Enhancement of a Time-Delay PUF Design by Utilizing Integrated Nanoscale ReRAM Devices. *Beckmann, K.*, +, *TETC July -Sept. 2017 304-316*
- Tunnel FET Current Mode Logic for DPA-Resilient Circuit Designs. *Bi, Y.*, +, *TETC July -Sept. 2017 340-352*

M**Magnetoelectronics**

- Energy Efficient Reconfigurable Threshold Logic Circuit with Spintronic Devices. *He, Z.*, +, *TETC April -June 2017 223-237*

Manufacturing

- High-Performance, Cost-Effective 3D Stacked Wide-Operand Adders. *Voicu, G.R.*, +, *TETC April -June 2017 179-192*

Market research

- Guest Editorial: Special Issue on Emerging Trends in Education – Part II. *Laplante, P.A.*, +, *TETC Jan. -March 2017 5-6*

Mathematics computing

- Similarity-Based Grouping to Support Teachers on Collaborative Activities in an Exploratory Mathematical Microworld. *Gutierrez-Santos, S.*, +, *TETC Jan. -March 2017 56-68*

Measurement

- InvarNet-X*: A Black-Box Invariant-Based Approach to Diagnosing Big Data Systems. *Chen, P.*, +, *TETC Oct. -Dec. 2017 450-465*

Mechanical factors

- Guest Editors Introduction: Security of Beyond CMOS Devices: Issues and Opportunities. *Bhunia, S.*, +, *TETC July -Sept. 2017 302-303*

Medical computing

- Cost Efficient Resource Management in Fog Computing Supported Medical Cyber-Physical System. *Gu, L.*, +, *TETC Jan. -March 2017 108-119*

Memory management

- A Novel Hardware Accelerator for Embedded Object Detection Applications. *Watson, D.*, +, *TETC Oct. -Dec. 2017 551-562*

Microfluidics

- Precise Enumeration of Circulating Tumor Cells Using Support Vector Machine Algorithm on a Microfluidic Sensor. *Guo, J.*, +, *TETC Oct. -Dec. 2017 518-525*

Microprocessor chips

- Sudden Power-Outage Resilient In-Processor Checkpointing for Energy-Harvesting Nonvolatile Processors. *Onizawa, N.*, +, *TETC April -June 2017 151-163*

Microrelays

- Timing Attack and Countermeasure on NEMS Relay Based Design of Block Ciphers. *Mazumdar, B.*, +, *TETC July -Sept. 2017 317-328*

Microwave integrated circuits

- InvarNet-X*: A Black-Box Invariant-Based Approach to Diagnosing Big Data Systems. *Chen, P.*, +, *TETC Oct. -Dec. 2017 450-465*

Minimization

- A Power-Aware Digital Multilayer Perceptron Accelerator with On-Chip Training Based on Approximate Computing. *Kim, D.*, +, *TETC April -June 2017 164-178*

Mobile computing

- A Routing-Protocol-Independent Caching Framework for Mobile Clouds. *Feng, Y.*, +, *TETC July -Sept. 2017 353-366*
- Cost Efficient Resource Management in Fog Computing Supported Medical Cyber-Physical System. *Gu, L.*, +, *TETC Jan. -March 2017 108-119*
- Design and Implementation of Location-Based Learning Games: Four Case Studies with “QuesTInSitu: The Game”. *Melero, J.*, +, *TETC Jan. -March 2017 84-94*
- The Social Internet of Thing (S-IOT)-Based Mobile Group Handoff Architecture and Schemes for Proximity Service. *Huang, C.*, +, *TETC July -Sept. 2017 425-437*

Mobile handsets

- How Well Can a User's Location Privacy Preferences be Determined Without Using GPS Location Data?. *Maekawa, T.*, +, *TETC Oct. -Dec. 2017 526-539*

Mobility management (mobile radio)

- A User Centered Multi-Objective Handoff Scheme for Hybrid 5G Environments. *Qiang, L.*, +, *TETC July -Sept. 2017 380-390*
- The Social Internet of Thing (S-IOT)-Based Mobile Group Handoff Architecture and Schemes for Proximity Service. *Huang, C.*, +, *TETC July -Sept. 2017 425-437*

Monitoring

- A Comprehensive Study of Security of Internet-of-Things. *Mosenia, A.*, +, *TETC Oct. -Dec. 2017 586-602*

Multilayer perceptrons

- A Power-Aware Digital Multilayer Perceptron Accelerator with On-Chip Training Based on Approximate Computing. *Kim, D.*, +, *TETC April -June 2017 164-178*

Multiplying circuits

- A High-Performance FPGA Architecture Using One-Level RRAM-Based Multiplexers. *Tang, X.*, +, *TETC April -June 2017 210-222*

Multiprocessing systems

- A Software Toolchain for Variability Awareness on Heterogenous Multicore Platforms. *Nittala, R.*, +, *TETC Jan. -March 2017 95-107*

N

Nanoelectromechanical devices

Timing Attack and Countermeasure on NEMS Relay Based Design of Block Ciphers. *Mazumdar, B.*, +, *TETC July -Sept. 2017 317-328*

Nanoscale devices

Guest Editors Introduction: Security of Beyond CMOS Devices: Issues and Opportunities. *Bhunia, S.*, +, *TETC July -Sept. 2017 302-303*

Network routing

A High-Performance FPGA Architecture Using One-Level RRAM-Based Multiplexers. *Tang, X.*, +, *TETC April -June 2017 210-222*

Network topology

Morphus: Supporting Online Reconfigurations in Sharded NoSQL Systems. *Ghosh, M.*, +, *TETC Oct. -Dec. 2017 466-479*

Nonlinear programming

Cost Efficient Resource Management in Fog Computing Supported Medical Cyber-Physical System. *Gu, L.*, +, *TETC Jan. -March 2017 108-119*

Nonvolatile memory

Guest Editorial: Introduction to the Special Issue on Emerging Technologies and Designs for Application-Specific Computing. *Liu, W.*, +, *TETC April -June 2017 148-150*

O

Object detection

A Novel Hardware Accelerator for Embedded Object Detection Applications. *Watson, D.*, +, *TETC Oct. -Dec. 2017 551-562*

P

Parallel programming

A Software Toolchain for Variability Awareness on Heterogenous Multicore Platforms. *Nittala, R.*, +, *TETC Jan. -March 2017 95-107*

Pareto optimization

A User Centered Multi-Objective Handoff Scheme for Hybrid 5G Environments. *Qiang, L.*, +, *TETC July -Sept. 2017 380-390*

Pattern clustering

Identifying At-Risk Students for Early Interventions—A Time-Series Clustering Approach. *Hung, J.*, +, *TETC Jan. -March 2017 45-55*

Payloads

Hardware Trojan Detection in Behavioral Intellectual Properties (IP's) Using Property Checking Techniques. *Veeranna, N.*, +, *TETC Oct. -Dec. 2017 576-585*

Peripheral interfaces

Designing an FPGA-Accelerated Homomorphic Encryption Co-Processor. *Cousins, D.B.*, +, *TETC April -June 2017 193-206*

Pipeline arithmetic

NP-Dynamic Skybridge: A Fine-Grained 3D IC Technology with NP-Dynamic Logic. *Shi, J.*, +, *TETC April -June 2017 286-299*

Power aware computing

A Power-Aware Digital Multilayer Perceptron Accelerator with On-Chip Training Based on Approximate Computing. *Kim, D.*, +, *TETC April -June 2017 164-178*

Sudden Power-Outage Resilient In-Processor Checkpointing for Energy-Harvesting Nonvolatile Processors. *Onizawa, N.*, +, *TETC April -June 2017 151-163*

Power consumption

A Power-Aware Digital Multilayer Perceptron Accelerator with On-Chip Training Based on Approximate Computing. *Kim, D.*, +, *TETC April -June 2017 164-178*

Power generation

User-Centric Demand Response Management in the Smart Grid With Multiple Providers. *Maharjan, S.*, +, *TETC Oct. -Dec. 2017 494-505*

Predictive models

ALOJA: A Framework for Benchmarking and Predictive Analytics in Hadoop Deployments. *Berral, J.L.*, +, *TETC Oct. -Dec. 2017 480-493*

Privacy

How Well Can a User's Location Privacy Preferences be Determined Without Using GPS Location Data?. *Maekawa, T.*, +, *TETC Oct. -Dec. 2017 526-539*

Production engineering computing

DTD: A Novel Double-Track Approach to Clone Detection for RFID-Enabled Supply Chains. *Huang, J.*, +, *TETC Jan. -March 2017 134-140*

Program processors

A Novel Hardware Accelerator for Embedded Object Detection Applications. *Watson, D.*, +, *TETC Oct. -Dec. 2017 551-562*

Guest Editorial: Introduction to the Special Issue on Emerging Technologies and Designs for Application-Specific Computing. *Liu, W.*, +, *TETC April -June 2017 148-150*

Psychology

Relation Between Combinations of Personal Characteristic Types and Educational Effectiveness for a Controlled Project-Based Learning Course. *Sumaga, Y.*, +, *TETC Jan. -March 2017 69-76*

Public administration

Social Sensors Based Online Attention Computing of Public Safety Events. *Xu, Z.*, +, *TETC July -Sept. 2017 403-411*

Q

Query processing

Distribution Based Workload Modelling of Continuous Queries in Clouds. *Khoshkbarforoushha, A.*, +, *TETC Jan. -March 2017 120-133*

Queueing analysis

Queueing-Theory-Based Models for Software Reliability Analysis and Management. *Huang, C.*, +, *TETC Oct. -Dec. 2017 540-550*

R

Radiofrequency identification

DTD: A Novel Double-Track Approach to Clone Detection for RFID-Enabled Supply Chains. *Huang, J.*, +, *TETC Jan. -March 2017 134-140*

Recommender systems

Temporal Factor-Aware Video Affective Analysis and Recommendation for Cyber-Based Social Media. *Niu, J.*, +, *TETC July -Sept. 2017 412-424*

Reconfigurable architectures

Guest Editorial: IEEE Transactions on Computers and IEEE Transactions on Emerging Topics in Computing Joint Special Section on Innovation in Reconfigurable Computing Fabrics from Devices to Architectures. *DeMara, R.F.*, +, *TETC April -June 2017 207-209*

Renewable energy sources

User-Centric Demand Response Management in the Smart Grid With Multiple Providers. *Maharjan, S.*, +, *TETC Oct. -Dec. 2017 494-505*

Resistive RAM

A High-Performance FPGA Architecture Using One-Level RRAM-Based Multiplexers. *Tang, X.*, +, *TETC April -June 2017 210-222*
Performance Enhancement of a Time-Delay PUF Design by Utilizing Integrated Nanoscale ReRAM Devices. *Beckmann, K.*, +, *TETC July -Sept. 2017 304-316*

Resource allocation

A Software Toolchain for Variability Awareness on Heterogenous Multicore Platforms. *Nittala, R.*, +, *TETC Jan. -March 2017 95-107*
Cost Efficient Resource Management in Fog Computing Supported Medical Cyber-Physical System. *Gu, L.*, +, *TETC Jan. -March 2017 108-119*

Routing protocols

A Routing-Protocol-Independent Caching Framework for Mobile Clouds. *Feng, Y.*, +, *TETC July -Sept. 2017 353-366*

Runtime

Hardware Trojan Detection in Behavioral Intellectual Properties (IP's) Using Property Checking Techniques. *Veeranna, N.*, +, *TETC Oct. -Dec. 2017 576-585*

S

Security

A Comprehensive Study of Security of Internet-of-Things. *Mosenia, A.*, +, *TETC Oct. -Dec. 2017 586-602*

A Flexible Online Checking Technique to Enhance Hardware Trojan Horse Detectability by Reliability Analysis. *Chakraborty, R.S.*, +, *TETC April -June 2017 260-270*

Guest Editors Introduction: Security of Beyond CMOS Devices: Issues and Opportunities. *Bhunia, S.*, +, *TETC July -Sept. 2017 302-303*

Security of data

DTD: A Novel Double-Track Approach to Clone Detection for RFID-Enabled Supply Chains. *Huang, J.*, +, *TETC Jan. -March 2017 134-140*

Sensors

How Well Can a User's Location Privacy Preferences be Determined Without Using GPS Location Data?. *Maekawa, T.*, +, *TETC Oct. -Dec. 2017 526-539*

Sequences

DTD: A Novel Double-Track Approach to Clone Detection for RFID-Enabled Supply Chains. *Huang, J.*, +, *TETC Jan. -March 2017 134-140*

Serious games (computing)

Mapping Learning and Game Mechanics for Serious Games Analysis in Engineering Education. *Callaghan, M.*, +, *TETC Jan. -March 2017 77-83*

Servers

Morphus: Supporting Online Reconfigurations in Sharded NoSQL Systems. *Ghosh, M.*, +, *TETC Oct. -Dec. 2017 466-479*

Smart devices

A Comprehensive Study of Security of Internet-of-Things. *Mosenia, A.*, +, *TETC Oct. -Dec. 2017 586-602*

Smart grids

Distributed Software Emulator for Cyber-Physical Analysis in Smart Grid. *Tan, S.*, +, *TETC Oct. -Dec. 2017 506-517*

User-Centric Demand Response Management in the Smart Grid With Multiple Providers. *Maharjan, S.*, +, *TETC Oct. -Dec. 2017 494-505*

Social aspects of automation

Identifying At-Risk Students for Early Interventions—A Time-Series Clustering Approach. *Hung, J.*, +, *TETC Jan. -March 2017 45-55*

Social networking (online)

Social Sensors Based Online Attention Computing of Public Safety Events. *Xu, Z.*, +, *TETC July -Sept. 2017 403-411*

Temporal Factor-Aware Video Affective Analysis and Recommendation for Cyber-Based Social Media. *Niu, J.*, +, *TETC July -Sept. 2017 412-424*

Software engineering

A Software Toolchain for Variability Awareness on Heterogenous Multicore Platforms. *Nittala, R.*, +, *TETC Jan. -March 2017 95-107*

ALOJA: A Framework for Benchmarking and Predictive Analytics in Hadoop Deployments. *Berral, J.L.*, +, *TETC Oct. -Dec. 2017 480-493*

Distributed Software Emulator for Cyber-Physical Analysis in Smart Grid. *Tan, S.*, +, *TETC Oct. -Dec. 2017 506-517*

Software reliability

Queueing-Theory-Based Models for Software Reliability Analysis and Management. *Huang, C.*, +, *TETC Oct. -Dec. 2017 540-550*

Software systems

Queueing-Theory-Based Models for Software Reliability Analysis and Management. *Huang, C.*, +, *TETC Oct. -Dec. 2017 540-550*

Special issues and sections

Guest Editorial: IEEE Transactions on Computers and IEEE Transactions on Emerging Topics in Computing Joint Special Section on Innovation in Reconfigurable Computing Fabrics from Devices to Architectures. *DeMara, R.F.*, +, *TETC April -June 2017 207-209*

Guest Editorial: Introduction to the Special Issue on Emerging Technologies and Designs for Application-Specific Computing. *Liu, W.*, +, *TETC April -June 2017 148-150*

Guest Editorial: Special Issue on Emerging Trends in Education – Part II. *Laplante, P.A.*, +, *TETC Jan. -March 2017 5-6*

Guest Editors Introduction: Security of Beyond CMOS Devices: Issues and Opportunities. *Bhunia, S.*, +, *TETC July -Sept. 2017 302-303*

SRAM cells

Guest Editorial: IEEE Transactions on Computers and IEEE Transactions on Emerging Topics in Computing Joint Special Section on Innovation in Reconfigurable Computing Fabrics from Devices to Architectures. *DeMara, R.F.*, +, *TETC April -June 2017 207-209*

Supply chain management

DTD: A Novel Double-Track Approach to Clone Detection for RFID-Enabled Supply Chains. *Huang, J.*, +, *TETC Jan. -March 2017 134-140*

Support vector machines

Precise Enumeration of Circulating Tumor Cells Using Support Vector Machine Algorithm on a Microfluidic Sensor. *Guo, J.*, +, *TETC Oct. -Dec. 2017 518-525*

Temporal Factor-Aware Video Affective Analysis and Recommendation for Cyber-Based Social Media. *Niu, J.*, +, *TETC July -Sept. 2017 412-424*

System-on-chip

A Novel Hardware Accelerator for Embedded Object Detection Applications. *Watson, D.*, +, *TETC Oct. -Dec. 2017 551-562*

T

Table lookup

A High-Performance FPGA Architecture Using One-Level RRAM-Based Multiplexers. *Tang, X.*, +, *TETC April -June 2017 210-222*

Teaching

FORGE Toolkit: Leveraging Distributed Systems in eLearning Platforms. *Jourjon, G.*, +, *TETC Jan. -March 2017 7-19*

Mapping Learning and Game Mechanics for Serious Games Analysis in Engineering Education. *Callaghan, M.*, +, *TETC Jan. -March 2017 77-83*

Three-dimensional displays

High-Performance, Cost-Effective 3D Stacked Wide-Operand Adders. *Voicu, G.R.*, +, *TETC April -June 2017 179-192*

Three-dimensional integrated circuits

NP-Dynamic Skybridge: A Fine-Grained 3D IC Technology with NP-Dynamic Logic. *Shi, J.*, +, *TETC April -June 2017 286-299*

Threshold logic

Energy Efficient Reconfigurable Threshold Logic Circuit with Spintronic Devices. *He, Z.*, +, *TETC April -June 2017 223-237*

Through-silicon vias

High-Performance, Cost-Effective 3D Stacked Wide-Operand Adders. *Voicu, G.R.*, +, *TETC April -June 2017 179-192*

Time series

DTD: A Novel Double-Track Approach to Clone Detection for RFID-Enabled Supply Chains. *Huang, J.*, +, *TETC Jan. -March 2017 134-140*

Identifying At-Risk Students for Early Interventions—A Time-Series Clustering Approach. *Hung, J.*, +, *TETC Jan. -March 2017 45-55*

Transforms

Designing an FPGA-Accelerated Homomorphic Encryption Co-Processor. *Cousins, D.B.*, +, *TETC April -June 2017 193-206*

Trojan horses

Hardware Trojan Detection in Behavioral Intellectual Properties (IP's) Using Property Checking Techniques. *Veeranna, N.*, +, *TETC Oct. -Dec. 2017 576-585*

Tumors

Precise Enumeration of Circulating Tumor Cells Using Support Vector Machine Algorithm on a Microfluidic Sensor. *Guo, J.*, +, *TETC Oct. -Dec. 2017 518-525*

Tunnel transistors

Tunnel FET Current Mode Logic for DPA-Resilient Circuit Designs. *Bi, Y.*, +, *TETC July -Sept. 2017 340-352*

V

Virtual machines

Cost Efficient Resource Management in Fog Computing Supported Medical Cyber-Physical System. *Gu, L.*, +, *TETC Jan. -March 2017 108-119*

VLSI

Univariate Power Analysis Attacks Exploiting Static Dissipation of Nanometer CMOS VLSI Circuits for Cryptographic Applications. *Bellizia, D.*, +, *TETC July -Sept. 2017 329-339*

W

Wireless networks

Location Verification of Wireless Internet Clients: Evaluation and Improvements. *Abdou, A.*, +, *TETC Oct. -Dec. 2017 563-575*

Wireless sensor networks

A Comprehensive Study of Security of Internet-of-Things. *Mosenia, A.*, +, *TETC Oct. -Dec. 2017 586-602*

X

XML

A Software Toolchain for Variability Awareness on Heterogenous Multicore Platforms. *Nittala, R.*, +, *TETC Jan. -March 2017 95-107*