GENERAL INFORMATION

IMPORTANT: To prepare the congress program/schedule, the title of

 all papers, authors names, affiliations were extracted

 from the meta-data of the draft paper submissions

 (manuscripts submitted by the authors for evaluation).

 Any changes to the titles of the papers, authors names,

 affiliations, ... are not reflected in this program. The

 FINAL versions of the papers (uploaded to the publication

 portal) will have the correct information.

REGISTRATION: For Congress Receipt Pickup & Booklet(s), ...

 (LOCATION: Lotus Ballrooms 1)

 July 26 (Sunday): 05:00pm - 07:00pm

 July 27 (Monday): 07:30am - 05:00pm

 July 28 (Tuesday): 07:30am - 05:00pm

BREAKFASTS: July 27 (Monday): 07:30am - 08:30am

 July 28 (Tuesday): 07:30am - 08:30am

 (LOCATION: Lotus Ballrooms 1)

DINNER: July 27 (Monday): 07:30pm - 10:00pm

 (LOCATION: Velvet Room Blue)

BREAKS: Refreshments

 July 27 (Monday): 10:20am - 10:40am

 July 27 (Monday): 03:00pm - 03:40pm

 July 28 (Monday): 10:20am - 10:40am

 July 28 (Monday): 03:00pm - 03:40pm

 (LOCATION: Lotus Ballrooms 1)

PROVISIONAL PLAN FOR JULY 29 AND/OR JULY 30:

 Informal panel discussions can be arranged on-site

 at the congress (this will be discussed with the

 attendees on July 27 - the logistics will be managed

 as a team).

July 27

07:30a - 05:00p: REGISTRATION

 (LOCATION: Lotus Ballrooms 1; Registration Counter/Desk)

08:30 - 09:00am: CONGRESS WELCOME REMARKS - July 27, Monday:

 Professor Emeritus Hamid R. Arabnia (Chair, Steering

 Committee & Coordinator), Department of Computer Science,

 University of Georgia, USA; Editor-in-Chief, The Journal

 of Supercomputing (Springer); Fellow, Center of Excellence

 in Terrorism, Resilience, Intelligence & Organized Crime

 Research (CENTRIC).

 (LOCATION: Galleria B-C)

09:00 - 09:10am: WELCOME - July 27, Monday:

 Richard Bayley

 Business Development Manager

 Colorado Engineering, Inc., Colorado Springs, Colorado, USA

 (LOCATION: Galleria B-C)

09:10 - 10:10am: KEYNOTE LECTURE/ADDRESS - Juy 27, Monday:

 THE PSYCHOLOGY OF ARTIFICIAL INTELLIGENCE: A CONVERSATION

 WITH SANDI

 Dr. James A. Crowder

 Systems Fellow at Colorado Engineering, Inc., USA

 (Formerly at Raytheon Technologies. Recipient of technical

 achievement awards from Lockheed Martin, General Dynamics,

 Northrup Grumman, & Raytheon Technologies)

 (LOCATION: Galleria B-C)

10:10 - 10:20am: COMMENTS - CONGRESS LOGISTICS/PLAN

 (LOCATION: Galleria B-C)

10:20 - 10:40am: BREAK

 (LOCATION: Lotus Ballrooms 1)

SESSION 1-MON: COMPUTATIONAL SCIENCE, DATA SCIENCE, AI/GAN AND APPLICATIONS

 Chair: Jonathan Fowler; Department of Computer Science,

 Colorado Technical University, Colorado Springs, Colorado, USA

 July 27, 2020 (Monday); 10:40am - 11:40am

 (LOCATION: Galleria B-C)

10:40 - 11:00am: FCS4092

 Evaluation of Classical Data Structures in the Java Collections

 Framework

 Anil L. Pereira

 School of Science and Technology, Georgia Gwinnett College,

 Lawrenceville, Georgia, USA

11:00 - 11:20am: ICA2533

 Fine Tuning a Generative Adversarial Network's Discriminator

 for Student Attrition Prediction

 Eric Stenton, Pablo Rivas\*, Eitel Lauria

 Department of Computer Science, Marist College,

 Poughkeepsie, New York, USA

July 27

11:20 - 11:40am: IKE3029

 A Dynamic Data and Information Processing Model for Unmanned

 Aircraft Systems

 Mikaela D. Dimaapi, Ryan D. L. Engle\*, Brent T. Langhals,

 Michael R. Grimaila, Douglas D. Hodson

 US Air Force Institute of Technology (AFIT), USA

SESSION 2-MON: COMPUTATIONAL SCIENCE, DATA SCIENCE, AND APPLICATIONS

 Chair: Jonathan Fowler; Department of Computer Science,

 Colorado Technical University, Colorado Springs, Colorado, USA

 July 27, 2020 (Monday); 11:40am - 12:20pm

 (LOCATION: Galleria B-C)

11:40a - 12:00p: HIM2143

 DRDr: Automatic Masking of Exudates and Microaneurysms Caused By

 Diabetic Retinopathy Using Mask R-CNN and Transfer Learning

 Farzan Shenavarmasouleh\*, Hamid R. Arabnia

 Department of Computer Science, University of Georgia, USA

12:00 - 12:20pm: HIM2374

 Security and Usability Considerations for a mHealth Application

 for Emergency Medical Services

 Abdullah Murad, Benjamin Schooley\*, Thomas Horan

 College of Computer & Information Systems, Umm A-Qura University,

 Mecca, Saudi Arabia; College of Engineering and Computing,

 University of South Carolina, Columbia, South Carolina, USA;

 School of Business, University of Redlands, California, USA

12:20 - 01:20pm: LUNCH (On Your Own)

SESSION 3-MON: AI, COGNITIVE COMPUTING, CPS/IOT, AND APPLICATIONS

 Chair: Ehsan Asali; Department of Computer Science,

 University of Georgia, USA

 July 27, 2020 (Monday); 01:20pm - 03:00pm

 (LOCATION: Galleria B-C)

01:20 - 01:40pm: ESC2277

 Wireless Blind Spot Detection and Embedded Microcontroller

 Bassam Shaer\*, Danita L. Marcum, Curtis Becker,

 Gabriella Gressett, Meridith Schmieder

 Electrical and Computer Engineering Department, University of

 West Florida, Fort Walton Beach, Florida, USA

01:40 - 02:00pm: ICA2391

 Dynamic Heuristics for Surveillance Mission Scheduling with

 Unmanned Aerial Vehicles in Heterogeneous Environments

 Dylan Machovec, James A. Crowder, Howard Jay Siegel,

 Sudeep Pasricha, Anthony A. Maciejewski

 Department of Electrical & Computer Engineering, Colorado State

 University, Fort Collins, Colorado, USA; Department of Computer

 Science, Colorado State University, Fort Collins, Colorado, USA;

 Colorado Engineering Inc., Colorado Springs, Colorado, USA;

02:00 - 02:20pm: ACC2214

 A Hybrid Cognitive System for Radar Monitoring and Control using

 the Rasmussen Cognition Model

 James A. Crowder\*, John N. Carbone

 Colorado Engineering Inc., Colorado Springs, Colorado, USA;

 Department of Electrical and Computer Engineering,

 Southern Methodist University, Dallas, Texas, USA

July 27

02:20 - 02:40pm: ICA2289

 Human Motion Recognition Using Zero-Shot Learning

 Farid Ghareh Mohammadi\*, Ahmed Imteaj, M. Hadi Amini, H. Arabnia

 Department of Computer Science, University of Georgia, USA;

 School of Computing & Information Sciences, Florida International

 University, Miami, Florida, USA

02:40 - 03:00pm: ICD8035

 Integrated Plant Growth and Disease Monitoring with IoT and

 Deep Learning Technology

 Jonathan Fowler\*, Soheyla Amirian

 Department of Computer Science, Colorado Technical University,

 Colorado Springs, Colorado, USA; Department of Computer Science,

 University of Georgia, Athens, Georgia, USA

03:00 - 03:20pm: BREAK & POSTERS

 July 27, 2020 (Monday)

 (LOCATION: Lotus Ballrooms 1)

03:20 - 06:00pm: Due to challenges with the Coronavirus pandemic, authors and

 speakers were given the following options: (a) Not presenting;

 (b) Providing pre-recorded presentations; and (c) Presenting

 online via Zoom. Unfortunately, some authors/speakers did not

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 Ballroom Galleria D-E (next door) where online (ZOOM)

 presentations are in progress; OR

 - Congress attendees can arrange an informal panel discussion

 (INTERESTING SUBJECTS: The Impact of CS/IT to Employment;

 Societal Impact of AI; AI and Ethical Issues; Online classes

 and Impact on Institutions; ...)

07:30 - 10:00pm: CONFERENCE RECEPTION DINNER / SOCIAL

 July 27 - Monday; 07:30pm

 (LOCATION: Velvet Room Blue)

July 27

Due to challenges with the Coronavirus pandemic, authors and speakers

were given the following options: (a) Not presenting; (b) Providing

pre-recorded presentations; and (c) Presenting online via ZOOM.

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conference (around July 20, 2020). Due to different time-zones and

time differences (globally), there are no BREAKs in the ZOOM sessions.

The ZOOM sessions will have BOTH, virtual AND on-site attendees.

These presentations will be projected on to a large screen for the

benefit of on-site audience (with amplified audio).

Speakers can (if they wish) ZOOM RECORD their own presentations and

provide a URL/web address to the congress (cs@american-cse.org) - we

would then provide the URL to others AFTER the congress (during the

month of August).

SESSION ZOOM-1-MON: ONLINE/ZOOM SESSION

 DATA SCIENCE, AI, LEARNING STRATEGIES, AND SOFTWARE

 ENGINEERING & APPLICATIONS

 Chairs: TBA

 July 27, 2020 (Monday); 08:20am - 10:00am

 (LOCATION: Galleria D-E)

08:20 - 08:40am: ICD8064

 How is Twitter Talking about COVID-19?

 Jesus Leopoldo Llano Garcia, Hector G. Ceballos,

 Francisco J. Cantu

 Tec de monterrey, Mexico

08:40 - 09:00am: PDP2604

 Challenges for Swarm of Drone-Based Intelligence

 Muhammed Akif Agca\*, Peiman Alipour Sarvari, Sebastien Faye,

 Djamel Khadraoui

 Luxembourg Institute of Science and Technology - LIST,

 Esch-Sur-Alzette, Luxembourg

09:00 - 09:20am: EEE2342

 Emerging Interactions of ERP, Big Data and Automotive Industry

 Florie Bandara, Uchitha Jayawickrama\*

 School of Business and Economics, Loughborough University,

 Loughborough, United Kingdom

09:20 - 09:40am: EEE4059

 The Effect of Matching Learning Material to Learners' Dyslexia

 Type on Reading Performance

 Hadeel Al-Dawsari\*, Robert Hendley

 Department of Computer Sciences, Princess Nourah Bint

 Abdulrahman University, Riyadh, Saudi Arabia;

 School of Computer Science, University of Birmingham,

 Birmingham, United Kingdom

09:40 - 10:00am: EEE2908

 Agile IT Service Management Frameworks and Standards - a Review

 Manuel Mora\*, Jorge Marx-Gomez, Fen Wang, Oswaldo Diaz

 Information Systems, Autonomous University of Aguascalientes,

 Aguascalientes, Ags., Mexico; Informatics, University of

 Oldenburg, Germany; Information Technology and Administration

 Management, Central Washington University, Ellensburg,

 Washington, USA; Central Data Center, INEGI, Aguascalientes,

 Ags., Mexico

July 27

SESSION ZOOM-2-MON: ONLINE/ZOOM SESSION

 ARTIFICIAL INTELLIGENCE, CPS, AND APPLIED COGNITIVE COMPUTING

 Chairs: TBA

 July 27, 2020 (Monday); 10:00am - 11:00am

 (LOCATION: Galleria D-E)

10:00 - 10:20am: ACC2970

 Defending Aviation Cyber-Physical Systems From DDOS Attack Using

 NARX Model

 Abdulaziz A. Alsulami\*, Saleh Zein-Sabatto

 Department of Electrical and Computer Engineering, Tennessee

 State University, Nashville, Tennessee, USA

10:20 - 10:40am: ICA2333

 The Effectiveness of Data Mining Techniques at Estimating Future

 Population Levels for Isolated Moose Populations

 Charles E. Knadler, Jr.

 Computer Science, Utah Valley University, Orem, Utah, USA

10:40 - 11:00am: ICA2995

 Using Games for Problem Solving in Complex Environments with

 Cultural Algorithms

 Faisal Waris\*, Robert Reynolds

 Wayne State University, Detroit, Michigan, USA

SESSION ZOOM-3-MON: ONLINE/ZOOM SESSION - SPECIAL SESSION

 (LOCATION: Galleria D-E)

11:00 - 11:40am: Want to Publish a Book?

 Join our Webinar with a Springer Editor

 Mary James

 Senior Editor, Springer, New York, USA

SESSION ZOOM-4-MON: ONLINE/ZOOM SESSION

 SCIENTIFIC COMPUTING AND COMPUTATIONAL SCIENCE

 Chairs: TBA

 July 27, 2020 (Monday); 11:40am - 01:00pm

 (LOCATION: Galleria D-E)

11:40a - 12:00p: CSC2487

 Long-Short Term Memeory Neural Network on the Trajectory

 Computing of Directly Dynamics Simulation

 Fred Wu\*, Colmenares-Diaz Eduardo, Poojitha Chapala,

 Tejaswi Jonnalagadda, Sailaja Peruka, Pooja Sonmale

 Department of Mathematics and Computer Science, West Virginia

 State University Institute, West Virginia, USA;

 Department of Computer Science, Midwestern State University,

 Wichita Falls, USA

July 27

12:00 - 12:20pm: CSC2517

 Dielectric Polymer Genome: Integrating Valence-Aware Polarizable

 Reactive Force Fields and Machine Learning

 Kuang Liu\*, Antonina Nazarova, Ankit Mishra, Yingwu Chen,

 Haichuan Lyu, Longyao Xu, Yue Yin, Qinai Zhao, Rajiv Kalia,

 Aiichiro Nakano, Ken-ichi Nomura, Priya Vashishta, Pankaj Rajak

 Collaboratory of Advanced Computing and Simulations, Department

 of Computer Science, Department of Physics & Astronomy, Department

 of Chemical Engineering & Materials Science, Department of

 Biological Sciences, University of Southern California,

 Los Angeles, California, USA; Loker Hydrocarbon Research Inst.

 and the Bridge@USC, Department of Chemistry, University of

 Southern California, California, USA; Mork Family Department of

 Chemical Engineering & Materials Science, University of Southern

 California, California, USA; Argonne Leadership Computing Facility,

 Argonne National Laboratory, Illinois, USA

12:20 - 12:40pm: CSC2920

 Orientation and Line Thickness Determination in Binary Images

 Sean Matz

 Claremont Graduate University, Claremont, California, USA

12:40 - 01:00pm: CSC2907

 Comparison of the IaaS Security Available from the Top Three

 Cloud Providers

 L. Kate Tomchik

 Kennesaw State University, Marietta, Georgia, USA

SESSION ZOOM-5-MON: ONLINE/ZOOM SESSION

 FRONTIERS IN EDUCATION: TEACHING AND LEARNING STRATEGIES

 AND SYSTEMS

 Chairs: TBA

 July 27, 2020 (Monday); 01:00pm - 02:20pm

 (LOCATION: Galleria D-E)

01:00 - 01:20pm: FEC2347

 Parent Teacher Portal (PTP): A Communication Tool

 Mudasser F. Wyne\*, Matthew Hunter, Joshua Moran, and

 Babita Patil

 School of Professional Studies, National University,

 San Diego, California, USA

01:20 - 01:40pm: FEC2527

 Computational Thinking and Flipped Classroom Model for

 Upper Division Computer Science Majors

 Antonio-Angel L. Medel\*, Anthony C. Bianchi, Alberto C. Cruz

 Department of Computer & Electrical Engineering and

 Computer Science, California State University, Bakersfield,

 California, USA

01:40 - 02:00pm: FEC4038

 A Dynamic Teaching Learning Methodology Enabling Fresh

 Graduates Starting Career at Mid-Level

 Abubokor Hanip\*, Mohammad Shahadat Hossain

 Founder and CEO, PeopleNTech Institute of Information

 Technology, Inc.,USA; Department of Computer Science and

 Engineering, University of Chittagong, Bangladesh

July 27

02:00 - 02:20pm: FEC4037

 Preparing Computing Graduates for the Workplace:

 An Assessment of Relevance of Curricula to Industry

 Ioana Chan Mow\*, Elisapeta Mauai, Vaisualua Okesene, and

 Ioana Sinclair

 Faculty of Science, National University of Samoa, Samoa

SESSION ZOOM-6-MON: ONLINE/ZOOM SESSION

 APPLIED COGNITIVE COMPUTING, AI, AND APPLICATIONS

 Chairs: TBA

 July 27, 2020 (Monday); 02:20pm - 04:00pm

 (LOCATION: Galleria D-E)

02:20 - 02:40pm: ACC2446

 An Adaptive Tribal Topology for Particle Swarm Optimization

 Kenneth Brezinski\*, Ken Ferens

 Department of Electrical and Computer Engineering,

 University of Manitoba, Winnipeg, Canada

02:40 - 03:00pm: ACC2596

 A Hybrid Chaotic Activation Function for Artificial

 Neural Networks

 Siobhan Reid\*, Ken Ferens

 Department of Electrical and Computer Engineering,

 University of Manitoba, Winnipeg, MB, Canada

03:00 - 03:20pm: ACC2927

 A Cognitive Unsupervised Clustering for Detecting Cyber Attacks

 Kaiser Nahiyan\*, Samilat Kaiser, Ken Ferens

 Department of Electrical and Computer Engineering,

 University of Manitoba, Winnipeg, MB, Canada

03:20 - 03:40pm: ACC2936

 Variance Fractal Dimension Feature Selection for Detection of

 Cyber Security Attacks

 Samilat Kaiser\*, Ken Ferens

 Department of Electrical and Computer Engineering,

 University of Manitoba, Winnipeg, MB, Canada

03:40 - 04:00pm: ACC4078

 Simulated Annealing Embedded Within Personal Velocity Update

 of Particle Swarm Optimization

 Ainslee Heim\*, Ken Ferens

 Department of Electrical and Computer Engineering,

 University of Manitoba, Winnipeg, MB, Canada

July 27

SESSION ZOOM-7-MON: ONLINE/ZOOM SESSION

 INFORMATION & KNOWLEDGE ENGINEERING + DATA SCIENCE +

 HEALTH INFORMATICS

 Chairs: TBA

 July 27, 2020 (Monday); 04:00pm - 06:40pm

 (LOCATION: Galleria D-E)

04:00 - 04:20pm: EEE2409

 Research on Efficient and Fuzzy Matching Algorithm in Information Dissemination System

 Qinwen Zuo, Fred Wu\*, Fei Yan, Shaofei Lu, Colmenares-Diaz Eduardo, Junbin Liang (Heng Wu)

 Information System Department, State Key Laboratory of NBC, Protection for Civilian,

 Beijng, P. R. China; Department of Mathematics and Computer Science, West Virginia

 State University Institute, West Virginia, USA; Department of Information Technology,

 Central Research Institute of History and Documents, Beijing, P. R. China; College

 of Computer Science & Electronic Engineering, Hunan University, Changsha,

 P. R. China; Department of Computer Science, Midwestern State

 University, Wichita Falls, Texas, USA; School of Computer and

 Electronics Information, Guangxi University, P. R. China

04:20 - 04:40pm: HIM2933

 ICT and the Environment: Strategies to Tackle Health and

 Environmental Challenges in Nigeria

 Tochukwu Ikwunne\*, Lucy Hederman

 ADAPT Centre, Trinity College Dublin, Ireland

04:40 - 05:00pm: IKE2490

 A Human Resources Competence Actualization Approach for

 Expert Networks

 Mikhail Petrov

 SPIIRAS, Saint Petersburg, Russia

05:00 - 05:20pm: IKE2555

 Human-Computer Interaction Interface for Driver Suspicious

 Action Analysis in Vehicle Cabin

 Igor Lashkov\*, Alexey Kashevnik

 SPIIRAS, Saint Petersburg, Russia

05:20 - 05:40pm: IKE2140

 Utilizing Economic Activity and Data Science to Predict and

 Mediate Global Conflict

 Kaylee-Anna Jayaweera, Jens Mache, Caitlin Garcia,

 Quinn Vinlove, Alain Kagi, Kris Gado

 Lewis and Clarke College, USA

05:40 - 06:00pm: ICD8048

 Automated Prediction of Voter's Party Affiliation using AI

 Sabiha Mahmud

 Mercyhurst University, USA

06:00 – 06:20pm: IKE4118

 Data-driven Environmental Management: A Digital Prototype Dashboard

 to Analyze and Monitor the Precipitation on Susquehanna River Basin

 Siamak Aram\*, Maria H. Rivero, Nikesh Pahuja, Roozbeh Sadeghian,

 Joshua L. R. Paulino, Michael Meyer, James Shallenberger

 Harrisburg University School of Science and Technology,

 Harrisburg, PA, USA; Susquehanna River Basin Commission, Harrisburg,

 PA, USA

06:20 – 06:40pm: MSV4084

 How do Decorations and Word Appearance Influence the Relative Size

 Perception in Viewers of Tag Clouds?

 Khaldoon Dhou\*, Robert Kosara, Mirsad Hadzikadic, Mark Faust

 Texas A&M University Central Texas, Texas, USA;

July 28

07:00a - 05:00p: REGISTRATION

 (LOCATION: Lotus Ballrooms 1; Registration Counter/Desk)

SESSION 4-TUE: ARTIFICIAL INTELLIGENCE AND NOVEL APPLICATIONS

 Chair: Ehsan Asali; Department of Computer Science,

 University of Georgia, USA

 July 28, 2020 (Tuesday); 08:20am - 10:20am

 (LOCATION: Galleria B-C)

08:20 - 08:40pm: FREE SLOT

08:40 - 09:00am: ICA2939

 A Prototype Implementation of the NNEF Interpreter

 Nakhoon Baek

 School of Computer Science and Engineering,

 Kyungpook National University, Daegu, Republic of Korea

09:00 - 09:20am: ICA4013

 Artificially Intelligent Cyber Security: Reducing Risk

 and Complexity

 John Carbone\*, James Crowder

 Colorado Engineering, Colorado Springs, Colorado, USA;

 Forcepoint, LLC, USA; Baylor University, Texas, USA

09:20 - 09:40am: ICA4108

 Neural-Based Adversarial Encryption of Images in ECB Mode

 P. Rivas-Perea, Prabuddha Banerjee\*

 School of Computer Science and Mathematics,

 Marist College, Poughkeepsie, New York, USA

09:40 - 10:00am: ICA2222

 Synthetic AI Nervous/Limbic Derived Instances (SANDI)

 Shelli Friess, James A. Crowder\*, Michael Hirsch

 School of Counseling, Walden University, Minneapolis,

 Minnesota, USA; Colorado Engineering Inc., Colorado, USA;

 President and CTO, ISEA TEK LLC, Maitland, Florida, USA

10:00 - 10:20am: ICA2249

 The Systems AI Thinking Process (SATP) for Artificial

 Intelligent Systems

 James A. Crowder\*, Shelli Friess

 Colorado Engineering Inc., Colorado Springs, Colorado, USA;

 School of Counseling, Walden University, Minneapolis,

 Minnesota, USA

10:20 - 10:40am: BREAK

SESSION 5-TUE: INFORMATION ENGINEERING + IMAGING SCIENCE + COMPUTATIONAL BIOLOGY

 + ARTIFICIAL INTELLIGENCE

 Chairs: TBA

 July 28, 2020 (Tuesday); 10:40am - 12:20pm

 (LOCATION: Galleria B-C)

10:40 - 11:00am: ICA2381

 Combination of Variational Autoencoders and Generative Adversarial

 Network into an Unsupervised Generative Model

 Ali Jaber Almalki\*, Pawel Wocjan

 Department of Computer Science, University of Central Florida,

 Orlando, Florida, USA

July 28

11:00 - 11:20am: IKE2405

 Content-Based Image Retrieval Using Deep Learning

 Tristan Jordan, Heba Elgazzar\*

 School of Engineering and Computer Science, Morehead State

 University, Morehead, Kentucky, USA

11:20 - 11:40am: ICA2091

 Priority Management in a Cybernetic Organization:

 A Simulation Study

 Puche J.\*, Costas J., Ponte B., Pino R., De la Fuente D.

 Department of Applied Economics, Faculty of Economics and

 Business, University of Burgos, Plaza Infanta Dona Elena s/n,

 Burgos, Spain

11:40 - 12:00pm: IPC2142

 DeepMSRF: A novel Deep Multimodal Speaker Recognition

 Framework with Feature Selection

 Ehsan Asali, Farzan Shenavarmasouleh\*, Farid Ghareh Mohammadi,

 Prasanth Sengadu Suresh, Hamid R. Arabnia

 Department of Computer Science, University of Georgia, USA

12:00 - 12:20pm: BIC2972

 Structural Exploration of RVFV L Protein Domain in Implicit and

 Explicit Solvents by Molecular Dynamics

 Gideon K. Gogovi

 Department of Computational and Data Sciences,

 George Mason University, Fairfax, Virginia, USA

12:20 - 01:20pm: LUNCH (On Your Own)

01:20 - 03:00pm: Due to challenges with the Coronavirus pandemic, authors and

 speakers were given the following options: (a) Not presenting;

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 (INTERESTING SUBJECTS: The Impact of CS/IT to Employment;

 Societal Impact of AI; AI and Ethical Issues; Online classes

 and Impact on Institutions; ...)

03:00 - 03:40pm: BREAK & POSTERS

 July 28, 2020 (Tuesday)

 (LOCATION: Lotus Ballrooms 1)

July 28

03:40 - 06:00pm: Due to challenges with the Coronavirus pandemic, authors and

 speakers were given the following options: (a) Not presenting;

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July 28

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provide a URL/web address to the congress (cs@american-cse.org) - we

would then provide the URL to others AFTER the congress (during the

month of August).

SESSION ZOOM-8-TUE: ONLINE/ZOOM SESSION

 DATA SCIENCE, MACHINE LEARNING, AND APPLICATIONS

 Chairs: TBA

 July 28, 2020 (Tuesday); 08:20am - 09:40am

 (LOCATION: Galleria D-E)

08:20 - 08:40am: ICD8022

 Towards a Reference Model for Artificial Intelligence

 Supporting Big Data Analysis

 Thoralf Reis\*, Marco X. Bornschlegl, Matthias L. Hemmje

 University of Hagen, Germany

08:40 - 09:00am: ICD8059

 Phoenix: A Scalable Streaming Hypergraph Analysis

 Framework

 Kuldeep Kurte, Neena Imam, S. M. Shamimul Hasan, and

 Ramakrishnan Kannan

 Oak Ridge National Laboratory, USA

09:00 - 09:20am: ICD8042

 Performance Analysis of Deep Neural Maps

 Boren Zheng\*, Lutz Hamel

 University of Rhode Island, USA

09:20 - 09:40am: ICD8074

 Detecting Asian Values in Asian News via Machine Learning

 Text Classification

 Li-Jing Chang

 Jackson State Univeristy, Jackson, Mississippi, USA

SESSION ZOOM-9-TUE: ONLINE/ZOOM SESSION

 EMBEDDED SYSTEMS, CYBER-PHYSICAL SYSTEMS, & APPLICATIONS

 Chairs: TBA

 July 28, 2020 (Tuesday); 09:40am - 10:40am

 (LOCATION: Galleria D-E)

09:40 - 10:00am: ESC2905

 Real-Time Operating Systems: Course Development

 Michael Rivnak, Leonidas Deligiannidis

 Department of Computer Science and Networking,

 Wentworth Institute of Technology, Boston, Massachusetts, USA

July 28

10:00 - 10:20am: ESC4027

 Software Defined Global Navigation Satellite Systems and

 Resilient Navigation for Embedded Automation

 Jeffrey Wallace\*, Angelica Valdivia

 Rocket Technology Systems LLC, Washington, DC, USA

10:20 - 10:40am: ESC4095

 Uncertainty Theory based Software Hardware Partitioning for

 Reliable Cyber-Physical System Design

 Amrita Chatterjee\*, Hassan Reza

 School of Electrical Engineering and Computer Science,

 University of North Dakota, North Dakota, USA

SESSION ZOOM-10-TUE: ONLINE/ZOOM SESSION

 CLOUD COMPUTING SYSTEMS, SECURITY, AND APPLICATIONS

 Chairs: TBA

 July 28, 2020 (Tuesday); 10:40am - 11:40am

 (LOCATION: Galleria D-E)

10:40 - 11:00am: GCC4033

 Securing Mobile Cloud Computing Using Encrypted Biometric

 Authentication

 Iehab Alrassan

 College of Computer and Information Sciences,

 King Saud University, Riyadh, Saudi Arabia

11:00 - 11:20am: GCC3000

 The Abaco Platform: A Performance and Scalability Study on

 the Jetstream Cloud

 Christian R. Garcia\*, Joe Stubbs, Julia Looney, Anagha Jamthe,

 Mike Packard, Kreshel Nguyen

 Texas Advanced Computing Center, University of Texas at Austin,

 Texas, USA; Department of Aerospace Engineering, The

 University of Texas at Austin, Texas, USA

11:20 - 11:40am: SAM9715

 Enhancing Data Security in the User Layer of Mobile Cloud

 Computing Environment: A Novel Approach

 Noah Oghenfego Ogwara\*, Krassie Petrova, Mee Loong Yang, and

 Stephen MacDonell

 Computer and Mathematical Sciences, Auckland University of

 Technology, Auckland, New Zealand

SESSION ZOOM-11-TUE: ONLINE/ZOOM SESSION

 ARTIFICIAL INTELLIGENCE + MACHINE LEARNING + IMAGING SCIENCE

 AND APPLICATIONS

 Chairs: TBA

 July 28, 2020 (Tuesday); 11:40am - 01:00pm

 (LOCATION: Galleria D-E)

11:40a - 12:00p: ICA2401

 Long Short Term Memory in Chemistry Dynamics Simulation

 Heng Wu\*, Shaofei Lu, Colmenares-Diaz Eduardo, Junbin Liang,

 Jingke She, Xiaolin Tan

 Department of Mathematics and Computer Science, West Virginia

 State University Institute, West Virginia, USA; College of

 Computer Science and Electronic Engineering, Hunan University,

 Changsha, P. R. China; Department of Computer Science,

 Midwestern State University, USA; School of Computer and

 Electronics Information, Guangxi University, P. R. China

July 28

12:00 - 12:20pm: ICA2054

 A Design on Multilayer Perceptron (MLP) Neural Network for

 Digit Recognition

 Isaac Westby, Hakduran Koc, Jiang Lu, Xiaokun Yang\*

 University of Houston Clear Lake, Houston, Texas, USA

12:20 - 12:40pm: ICA2092

 A Model for the Strategic Management of Innovation and R&D

 based on Real Options Valuation: Options to Abandon and Expand

 Clinical Trials per Disease

 Gascon F.\*, Alonso Bonis S., Puente J., Ponte B., De la Fuente D.

 Department of Business Administration, Faculty of Economics and

 Business, University of Oviedo, Avda. del Cristo, s/n, Oviedo,

 Asturias, Spain

12:40 - 01:00pm: IPC2589

 Deep Convolutional Likelihood Particle Filter for Visual Tracking

 Reza Jalil Mozhdehi\*, Henry Medeiros

 Marquette University, Milwaukee, Wisconsin, USA

SESSION ZOOM-12-TUE: ONLINE/ZOOM SESSION

 DISTRIBUTED SYSTEMS, HIGH-PERFORMANCE COMPUTING, INTERNET

 COMPUTING AND APPLICATIONS

 Chairs: TBA

 July 28, 2020 (Tuesday); 01:00pm - 02:40pm

 (LOCATION: Galleria D-E)

01:00 - 01:20pm: PDP2544

 Preliminary Performance and Programmability Comparison of the

 Thick Control Flow Architecture and Current Multicore CPUs

 Martti Forsell\*, Sara Nikula, Jussi Roivainen

 VTT, Oulu, Finland

01:20 - 01:40pm: PDP4111

 Tree-Based Fixed Data Transmission for Healthcare Sensor Networks

 Susumu Shibusawa\*, Toshiya Watanabe

 Ibaraki University, Hitachi, Ibaraki, Japan;

 National Institute of Technology, Gunma College, Gunma, Japan

01:40 - 02:00pm: ICM3027

 Per-user Access Control Framework for Link Connectivity and

 Network Bandwidth

 Shogo Kamata\*, Chunghan Lee, Susumu Date

 Graduate School of Information Science and Technology, Osaka

 University, Japan; Toyota Motor Corporation, Japan;

 Cybermedia Center, Osaka University, Japan

02:00 - 02:20pm: ICM2978

 Dynamic IoT Clustering Method for Massive IoT Systems

 Yunseok Chang

 Department of Computer Engineering, Daejin University,

 Pocheon, Republic of Korea

02:20 - 02:40pm: ICM2410

 ISLSTM: An Intelligent Scheduling Algorithm for Internet of Things

 Heng Wu\*, Shaofei Lu, Qinwen Zuo, Jon Musselwhite,

 Raj Vijeshbhai Patel, Sweya Reddy Dava

 Department of Mathematics and Computer and Science, West Viginia

 State University Insititute, West Viginia, USA; College of

 Electrical and Information Engineering, Hunan University, Changsha,

 P. R. China; State Key Laboratory of NBC, Protection for Civilian,

 Beijing Institute of Chemical Defense, Beijing, P. R. China

July 28

SESSION ZOOM-14-TUE: ONLINE/ZOOM SESSION

 SOFTWARE ENGINEERING

 Chairs: TBA

 July 28, 2020 (Tuesday); 02:40pm - 03:40pm

 (LOCATION: Galleria D-E)

02:40 - 03:00pm: SER2953

 Change Request Prediction in an Evolving Legacy System:

 A Comparison

 Lamees Alhazzaa\*, Anneliese Amschler Andrews

 Computer Science Department, Al-Imam Muhammad Bin Saud Islamic

 University, Riyadh, Saudi Arabia; Department of Computer

 Science, University of Denver, Denver, Colorado, USA

03:00 - 03:20pm: SER2386

 Technical Personality as Related to Intrinsic Personality Traits

 Marwan Shaban\*, Craig Tidwell, Janell Robinson, Adam J. Rocke

 Seminole State College, Sanford, Florida, USA

03:20 - 03:40pm: SER2564

 Analysis of Bug Types of Textbook Code with Open Source Software

 Young Lee\*, Jeong Yang

 Department of Computing and Cyber Security,

 Texas A&M University - San Antonio, Texas, USA

SESSION ZOOM-15-TUE: ONLINE/ZOOM SESSION

 INFORMATION & KNOWLEDGE ENGINEERING + IMAGING SCIENCE AND

 APPLICATIONS

 Chairs: TBA

 July 28, 2020 (Tuesday); 03:40pm - 04:40pm

 (LOCATION: Galleria D-E)

03:40 - 04:00pm: IKE2966

 GeoDataLinks: A Suggestion for a Replacement for the ESRI Shapefile

 Vitit Kantabutra

 Department of Electrical Engineering, Idaho State University,

 Pocatello, Idaho, USA

04:00 - 04:20pm: IKE4066

 Clearview, an Improved Temporal GIS Viewer and Its Use in

 Discovering Spatiotemporal Patterns

 Vitit Kantabutra

 Department of Electrical Engineering, Idaho State University,

 Pocatello, Idaho, USA

04:20 - 04:40pm: IPC2497

 Evolution of Convolutional Neural Networks for Lymphoma

 Classification

 Christopher David Walsh\*, Nicholas Kenelm Taylor

 Department of Computer Science, Heriot-Watt University,

 Edinburgh, Scotland

July 28

SESSION ZOOM-16-TUE: ONLINE/ZOOM SESSION

 CYBER SECURITY + SIMULATION, MODELING, AND VISUALIZATION +

 SOFTWARE SYSTEMS AND APPLICATIONS

 Chairs: TBA

 July 28, 2020 (Tuesday); 04:40pm – 07:00pm

 (LOCATION: Galleria D-E)

04:40 - 05:00pm: MSV2367

 A Virtual Serious Game for Nursing Education

 Youxin Luo\*, Abel A. Reyes, Parashar Dhakal, Manisa Baker,

 Julia Rogers, Xiaoli Yang

 Electrical and Computer Engineering Department, Purdue

 University Northwest, Hammond, Indiana, USA; Electrical &

 Computer Science Engineering, The University of Toledo,

 Toledo, Ohio, USA; College of Nursing, Purdue University

 Northwest, Hammond, Indiana, USA

05:00 - 05:20pm: MSV2373

 An Interactive Software to Learn Pathophysiology with 3D

 Virtual Models

 Abel A. Reyes\*, Youxin Luo, Parashar Dhakal, Julia Rogers,

 Manisa Baker, Xiaoli Yang

 Electrical and Computer Engineering Department, Purdue

 University Northwest, Hammond, Indiana, USA;

 Electrical and Computer Engineering Department, University

 of Toledo, Toledo, Ohio, USA; College of Nursing, Purdue

 University Northwest, Hammond, Indiana, USA

05:20 - 05:40pm: SAM9718

 A Hybrid Recommender System for Cybersecurity Based on a

 Rating Approach

 Carlos Ayala, Edison Loza-Aguirre\*, Kevin Jimenez, and

 Roberto O. Andrade

 Escuela Politecnica Nacional, Quito, Ecuador

05:40 - 06:00pm: SAM9735

 The Impact of 21st Century Skills and Computing Cognition

 Cyber Skills on Graduates' Work Readiness in Cyber Security

 Anna Griffin, Nicola Johnson, Craig Valli

 Cyber Security CRC, Australia; Security Research Institute,

 Edith Cowan University, Australia

06:00 – 06:20pm: SAM9731

 CyberCheck.me: A Review of a Small to Medium Enterprise Cyber

 Security Awareness Program

 Craig Valli, Ian Martinus, Jayne Stanley, Michelle Kirby

 Security Research Institute, Edith Cowan University, Australia;

 WA AustCyber Innovation Hub, Australia

06:20 – 06:40pm: SAM4006

 Analysis of Conpot and its BACnet Features for Cyber-Deception

 Warren Z. Cabral\*, Craig Valli, Leslie F. Sikos, Samuel G. Wakeling

 Cyber Security Co-Operative Research Centre, Australia;

 Security Research Institute, Edith Cowan University, WA, Australia

06:40 – 07:00pm: ICA2360

 A Similarity-Based Decision Process for Implementation Decisions

 Maryna Averkyna

 Estonian Business School, Tallinn, Estonia; The National University

 of Ostroh Academy, Seminarska, Ostroh, Ukraine

July 28

Due to challenges with the Coronavirus pandemic, authors and speakers

were given the following options: (a) Not presenting; (b) Providing

pre-recorded presentations; and (c) Presenting online via Zoom.

Unfortunately, some authors/speakers did not select any options;

if any of these authors/speakers show-up at the congress, their

talks/presentations will be scheduled on-site at the congress

(correct as of July 16, 2020):

o. BIC2977

 MinCNE: Identifying Conserved Non-Coding Elements using

 Min-Wise Hashing

 Sairam Behera\*, Jitender S. Deogun, Etsuko N. Moriyama

 Department of Computer Science and Engineering, University of

 Nebraska-Lincoln, Lincoln, Nebraska, USA; School of Biological

 Sciences, Center for Plant Science Innovation, University of

 Nebraska-Lincoln, Lincoln, Nebraska, USA

o. BIE2583

 Electrocardiogram Classification using Long Short-Term Memory

 Networks

 Shijun Tang

 Department of Science and Mathematics, Alvernia University,

 Reading, PA, USA

o. CSC2932

 Elemental Analysis of Oil Paints

 Shijun Tang\*, Rosemarie C. Chinni, Amber Malloy, Megan Olsson

 Alvernia University, Reading, PA, USA

o. EEE2413

 Tourism Service Auction Market for Saudi Arabia

 Saad Nasser Almutwa, Sungchul Hong

 Computer and Information Sciences Department, Towson University,

 Towson, Maryland, USA

o. FEC2462

 Examining the Influence of Participating in a Cyber Defense Track

 on Students' Cybersecurity Knowledge, Awareness, and Career Choices

 Michelle Peters\*, T. Andrew Yang, Wei Wei, Kewei Sha, Sadegh Davari

 University of Houston - Clear Lake, Houston, Texas, USA

o. GCC2141

 Enterprise Backend as a Service (EBaaS)

 Gokay Saldamli\*, Aditya Doshatti, Darshil Kapadia, Devashish Nyati,

 Maulin Bodiwala, Levent Ertaul

 Computer Engineering Department, San Jose State University,

 San Jose, California, USA; Department of Computer Science,

 California State University East Bay, Hayward, California, USA

o. ICA2125

 Cognitive Mathematics in Research and Education

 Konstantin Kozerenko, Elena B. Kozerenko\*

 Lyceum "The Second School", Moscow, Russia; Institute of Informatics

 Problems of the Federal Research Center, Computer Science and Control

 of the Russian Academy of Sciences, Moscow, Russia

July 28

o. ICA2126

 Discourse Profiling based on Analytical Textology

 Elena B. Kozerenko\*, Mikhael Yu. Mikheev, Lev I. Erlikh,

 Konstantin I. Kuznetsov, Nikolai V. Somin

 Institute of Informatics Problems of the Federal Research Center,

 Computer Science and Control of the Russian Academy of Sciences;

 Moscow State University, Research Computer Center, Moscow, Russia

o. ICA2127

 The Contrastive Study of Spatial Constructions on NPloc in the Russian

 Language and NP in the Chinese Language in the Cognitive Aspect

 Irene M. Kobozeva\*, Lie Dan

 Moscow State University, Moscow, Russia; Jilin Huaqiao Foreign

 Languages Institute, Changchun, P. R. China

o. ICA2128

 Methods and Algorithms for Generating Sustainable Cognitive Systems

 Based on Thematic Category Hierarchies for the Development of

 Heterogeneous Information Resources in Technological and Social Spheres

 Michael M. Charnine, Elena B. Kozerenko\*

 Institute of Informatics Problems of the Federal Research Center,

 Computer Science and Control of the Russian Academy of Sciences,

 Moscow, Russia

o. ICA2129

 Mental Model of Educational Environments

 Natalia R. Sabanina\*, Valery S. Meskov

 Moscow Pedagogical State University (MPSU), Moscow, Russia

o. ICD8030

 A Comparison of Important Features for Predicting Polish and Chinese

 Corporate Bankruptcies

 Yifan Ren, Gary Weiss\*

 Fordham University, USA

o. ICD8027

 Improving Physician Decision-Making and Patient Outcomes Using Analytics:

 A Case Study with The World's Leading Knee Replacement Surgeon

 Anish Pahwa\*, Shikhar Jamuar, Varun Kumar Singh, Matthew Lanham

 Purdue University, USA

o. ICD8040

 The Effectiveness of Pre-Trained Code Embeddings

 Ben Trevett\*, Donald Reay, Nick Taylor

 Heriot-Watt University, Edinburgh, Scotland, United Kingdom

o. ICD8046

 Nested Named Sets in Database Retrieval

 H. Paul Zellweger

 ArborWay Labs, USA

o. ICD8023

 A Holistic Approach for Determining Effective Promotional Product

 Groupings

 Rahul Raj\*, Matthew Lanham, Vinitha Ravindran, Siddharth Harisankar,

 Mehul Zawar, Xuanming Hu

 Purdue University, USA

July 28

o. ICD8044

 Enhancing User Experience by Integrating Real-Time Search Data with

 Historical Data to Personalize Recommendations for a Timeshare

 Exchange Company

 Hemanya Tyagi\*, Matthew Lanham, Robin Jindal, Mohinder Pal Goyal,

 Dibyamshu Shrestha

 Purdue University, USA

o. ICW3015

 Extended RTS/CTS Control based on Transmission Request Distribution

 in Wireless Ad-Hoc Networks

 Momoka Hara, Hiroaki Higaki\*

 Department of Robotics and Mechatronics, Tokyo Denki University,

 Tokyo, Japan

o. ICW3016

 Interference of Overhearing by Eavesdropper Nodes for Secure

 Wireless Ad-Hoc Networks

 Hinano Amano, Hiroaki Higaki\*

 Department of Robotics and Mechatronics, Tokyo Denki University,

 Tokyo, Japan

o. IPC2540

 Superpixel-based Stereoscopic Video Saliency Detection Using Support

 Vector Regression Learning

 Ting-Yu Chou, Jin-Jang Leou\*

 Department of Computer Science and Information Engineering,

 National Chung Cheng University, Chiayi, Taiwan

o. IPC2542

 Superpixel-based Multi-focus Image Fusion

 Kuan-Ni Lai, Jin-Jang Leou\*

 Department of Computer Science and Information Engineering,

 National Chung Cheng University, Chiayi, Taiwan

o. MSV2400

 Dealing Bridge Hands: A Study in Random Data Generation

 Peter M. Maurer

 Department of Computer Science, Baylor University, Waco, Texas, USA

o. MSV4084

 How do Decorations and Word Appearance Influence the Relative Size

 Perception in Viewers of Tag Clouds?

 Khaldoon Dhou\*, Robert Kosara, Mirsad Hadzikadic, Mark Faust

 Texas A&M University Central Texas, Texas, USA;

 Tableau Software, USA;

 University of North Carolina Charlotte, North Carolina, USA

o. MSV4127

 Modeling Digital Business Strategy During Crisis

 Sakir Yucel

 NetApp, Wexford, Pittsburgh, USA

o. MSV4067

 Modelling and Simulation of MEMS Gyroscope with Coventor MEMS+ and

 Matlab/SIMULINK Software

 Jacek Nazdrowicz\*, Adam Stawinski, Andrzej Napieralski

 Department of Microelectronics and Computer Science, Lodz University

 of Technology, Poland

July 28

o. PDP2586

 Reverse Engineering Process for NoSQL Databases

 Fatma Abdelhedi, Amal Ait Brahim, Rabah Tighilt Ferhat\*,

 Gilles Zurfluh

 CBI2 - TRIMANE, Paris, France; Toulouse Institute of Computer

 Science Research (IRIT), Toulouse Capitole University,

 Toulouse, France

o. PDP2600

 Two-Phase Commitment Problem in Distributed Systems with

 Fail-Stop Model

 Sung-Hoon Park\*, Yong-cheol Seo, Su-Chang Yoo

 Department of Computer Engineering, Chungbuk National University,

 Chungbuk, Republic of Korea

o. SAM9705

 Phishing Detection using Deep Learning

 Beatrice M. Cerda, Shengli Yuan\*, Lei Chen

 University of Houston - Downtown, Houston, Texas, USA;

 Georgia Southern University Statesboro, Georgia, USA

o. SAM9714

 The Organizational Cybersecurity Success Factors: An Exhaustive

 Literature Review

 Nancy Poehlmann, Kevin Matthe Caramancion\*, Mehdi Barati,

 Irem Tatar, Terry Merz

 Department of Information Science, University at Albany,

 State University of New York, Albany, New York, USA

o. SAM9719

 Vulnerability of Virtual Private Networks to Web Fingerprinting

 Attack

 Khaleque Kamal, Sultan Almuhammadi\*

 King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia

o. SAM4093

 Lightweight Network Steganography for Distributed Electronic Warfare

 System Communications

 Tim Lei, Jeremy Straub\*, Benjamin Bernard

 Department of Computer Science, San Francisco State University,

 San Francisco, California, USA; Institute for Cyber Security

 Education and Research, North Dakota State University, Fargo,

 North Dakota, USA; Department of Computer Science, North Dakota

 State University, Fargo, North Dakota, USA

o. SER4031

 Modeling Unmanned Aircraft System Maintenance Using Agile Model-Based

 Systems Engineering

 Justin R. Miller, Ryan D. L. Engle\*, Brent T. Langhals,

 Michael R. Grimaila, Douglas D. Hodson

 Air Force Institute of Technology, USA

July 28

Due to challenges with the Coronavirus pandemic, authors and speakers

were given the following options: (a) Not presenting; (b) Providing

pre-recorded presentations; and (c) Presenting online via ZOOM.

The list of papers whose authors have provided pre-recorded presentations

(or plan to do so) appears below: (The web/URLs to presentations appear

on the CSCE 2020 web site)

o. Cognitive Discovery Pipeline Applied to Informal Knowledge

 Nicola Severini\*, Pietro Leo, Paolo Bellavista

 Alma Mater Studiorum, Bologna, Italy;

 IBM Active Intelligence Center, IBM Italy, Bologna, Italy

o. Feature Set Optimization by Clustering, Univariate Association, Deep

 and Machine Learning Omics Wide Association Study (DMWAS) for

 Biomarkers Discovery as Tested on GTEx Pilot Dataset for Death due

 to Heart-Attack

 Abhishek Narain Singh

 ABioTek www.tinyurl.com/abinarain, Kuopio, Finland

o. A Novel Method for the Inverse Qsar/Qspr to Monocyclic Chemical

 Compounds based on Artificial Neural Networks and Integer Programming

 Ren Ito, Naveed Ahmed Azam\*, Chenxi Wang, Aleksandar Shurbevski,

 Hiroshi Nagamochi, Tatsuya Akutsu

 Department of Applied Mathematics & Physics, Kyoto University, Japan;

 Bioinformatics Center, Institute for Chemical Research,

 Kyoto University, Uji, Japan

o. Mathematical Modeling and Computer Simulations of Cancer Chemotherapy

 Frank Nani, Mingxian Jin\*

 Department of Mathematics and Computer Science, Fayetteville State

 University, Fayetteville, North Carolina, USA

o. A New Literature Based Discovery (LBD) Application Using the Pubmed

 Database

 Matthew Schofield\*, Gabriela Hristescu, Aurelian Radu

 Computer Science Department, Rowan University, Glassboro, New Jersey;

 Department of Cell, Developmental and Regenerative Biology,

 Icahn School of Medicine at Mount Sinai, New York, USA

o. Common Motifs in KEGG Cancer Pathways

 Bini Elsa Paul, Olaa Kasem, Haitao Zhao, Zhong-Hui Duan\*

 Department of Computer Science, University of Akron, Ohio, USA

o. Phenome to Genome - Application of GWAS to Asthmatic Lung Biomarker

 Gene Variants

 Adam Cankaya\*, Ravi Shankar

 College of Computer Engineering and Science, Florida Atlantic

 University, Florida, USA

o. POST-DS: A Methodology to Boost Data Science

 Carlos J. Costa

 Universidade de Lisboa, Portugal

o. Graph Network Community Based Regulatory Medicine and 'More' Using

 GraphBreak

 Abhishek Narain Singh

 ABioTek www.tinyurl.com/abinarain, Kuopio, Finland

July 28

o. Shallow SqueezeNext Architecture Implementation on Bluebox2.0

 Jayan Kant Duggal\*, Mohamed El-Sharkawy

 Department of Electrical and Computer Engineering, IoT Collaboratory,

 Purdue School of Engineering and Technology, IUPUI, Indiana, USA

o. Julia and Singularity for High Performance Computing

 Joesph Tippit, Douglas Hodson, Michael Grimaila

 Computer Science and Engineering Department, US Air Force Institute

 of Technology (AFIT), USA; Head, Systems Engineering & Management

 Department, US Air Force Institute of Technology (AFIT), USA

o. Trojan Banker Simulation Utilizing Python

 Drew Campbell, Jake Hall, Iyanu Odebode, Douglas Hodson, and

 Michael Grimaila

 Computer Science and Engineering Department, US Air Force Institute

 of Technology (AFIT), USA; Head, Systems Engineering & Management

 Department, US Air Force Institute of Technology (AFIT), USA

o. CovidLock a New Form of Ransomware

 Amber Modlin, Andres Gregory, Iyanu Odebode, Douglas Hodson, and

 Michael Grimaila

 Computer Science and Engineering Department, US Air Force Institute

 of Technology (AFIT), USA; Head, Systems Engineering & Management

 Department, US Air Force Institute of Technology (AFIT), USA

o. MSECT: Genome Wide Massive Sequence Exhaustive Comparison Tool

 Abhishek Narain Singh

 ABioTek www.tinyurl.com/abinarain, Kuopio, Finland

o. The New Office Threat: A Simulation Environment of Watering Hole

 Cyber Attacks

 Braeden Bowen, Jeremy Erqybar, Iyanu Odebode, Douglas Hodson, and

 Michael Grimaila

 Computer Science and Engineering Department, US Air Force Institute

 of Technology (AFIT), USA; Head, Systems Engineering & Management

 Department, US Air Force Institute of Technology (AFIT), USA

o. Simulation of SYN Flood Attacks and Counter-Attack Methods Using

 Average Connection Times

 Hai Vo, Raymond Kozlowski, Iyanu Odebode, Douglas Hodson, and

 Michael Grimaila

 Computer Science and Engineering Department, US Air Force Institute

 of Technology (AFIT), USA; Head, Systems Engineering & Management

 Department, US Air Force Institute of Technology (AFIT), USA

o. A Note on the Sensitivity of Generic Approximate Sparse Pseudoinverse

 Matrix for Solving Linear Least Squares Problems

 A. D. Lipitakis\*, G. A. Gravvanis, C. K. Filelis-Papadopoulos, and

 D. Anagnostopoulos

 Department of Informatics and Telematics, Harokopio University of

 Athens, Greece; Department of Electrical and Computer Engineering,

 School of Engineering, Democritus University of Thrace, University

 Campus, Kimmeria, Xanthi, Greece; University College Cork,

 University College Cork, Cork, Ireland

o. Large-scale Parallelization of Lattice QCD on Sunway Taihulight

 Supercomputer

 Ailin Xu\*, Zhongzhi Luan, Ming Gong, Xiangyu Jiang

 School of Computer Science and Engineering, Beihang University,

 Beijing, P. R. China; Institute of High Energy Physics, Chinese

 Academy of Sciences, Beijing, P. R. China

July 28

o. Are Collaboration Tools Safe? An Assessment of Their Use and Risks

 Cquoya Haughton, Maria Isabel Herrmann, Tammi Summers, Sonya Worrell,

 Samuel Olatunbosun\*, Taiwo Ajani

 Department of Computer Science, Norfolk State University,

 Virginia, USA; Department of Computer and Information Systems,

 Ferrum College, Virginia, USA

o. Scaleable Undergraduate Cyber-Security Curriculum Through

 Auto-Graded E-Learning Labs

 Aspen Olmsted

 Department of Computer Science, Fisher College, Boston, MA, USA

o. Smart Automation of an Integrated Water System

 Fatema Tuz Zohra, Bahram Asiabanpour\*

 Ingram School of Engineering, Texas State University,

 San Marcos, Texas, USA

o. Data Collection and Generation for Radio Frequency Signal Security

 Tarek A. Youssef, Guillermo A. Francia, III \*, Hakki Erhan Sevil

 Department of Electrical and Computer Engineering, University of

 West Florida, Florida, USA; Center for Cybersecurity, University

 of West Florida, Florida, USA; Department of Intelligent Systems

 and Robotics, University of West Florida, Florida, USA

o. BumpChat: A Secure Mobile Communication System

 Brian Kammourieh, Nahid Ebrahimi Majd\*, Ahmad Hadaegh

 Department of Computer Science and Information Systems,

 California State University San Marcos, California, USA

o. How to Extend the Single-Processor Paradigm to the Explicitly

 Many-Processor Approach

 Janos Vegh

 Kalimanos BT, Debrecen, Hungary

o. Random Self-Modifiable Computation

 Michael Stephen Fiske

 Aemea Institute, San Francisco, California, USA

o. Introducing Temporal Behavior to Computing Science

 Janos Vegh

 Kalimanos BT, Debrecen, Hungary

o. An Educational Guide to Creating Your Own Cryptocurrency

 Paul Medeiros, Leonidas Deligiannidis\*

 Department of Computer Science and Networking, Wentworth

 Institute of Technology, Boston, Massachusetts, USA

o. Using Dear Data Project to Introduce Data Literacy, and Information

 Literacy to Undergraduates

 Vetria L. Byrd

 Purdue University, West Lafayette, Indiana, USA

o. A Project-Based Approach to Teaching IoT

 Varick L. Erickson\*, Pragya Varshney, Levent Ertaul

 Department of Computer Science, California State University,

 East Bay, California, USA

o. Developing a Scalable Platform and Analytics Dashboard for Manual

 Physical Therapy Practices Using Pressure Sensing Fabric

 Tyler V. Rimaldi, Daniel R. Grossmann, Donald R. Schwartz\*

 School of Computer Science and Mathematics, Marist College,

 Poughkeepsie, New York, USA

July 28

o. Peer Assistant Role Models in a Graduate Computer Science Course

 Evava Pietri, Leslie Ashburn-Nardo, Snehasis Mukhopadhyay\*

 Department of Psychology, Indiana University Purdue University

 Indianapolis (IUPUI), Indiana, USA; Department of Computer and

 Information Science, Indiana University Purdue University

 Indianapolis (IUPUI), Indiana, USA

o. Team-Based Online Multidisciplinary Education on Big Data +

 High-Performance Computing + Atmospheric Sciences

 Jianwu Wang, Matthias K. Gobbert\*, Zhibo Zhang, Aryya Gangopadhyay

 Department of Information Systems, University of Maryland,

 Baltimore County, Maryland, USA; Department of Mathematics and

 Statistics, University of Maryland, Baltimore County, Maryland,

 USA; Department of Physics, University of Maryland,

 Baltimore County, Maryland, USA

o. An Educational Tool for Exploring the Pumping Lemma Property of

 Regular Languages

 Josue N. Rivera\*, Haiping Xu

 Computer and Information Science Department, University of

 Massachusetts Dartmouth, Dartmouth, Massachusetts, USA

o. Secure Business Intelligence Markup Language (secBIML)

 Aspen Olmsted

 Department of Computer Science, Fisher College, Boston, MA, USA

o. 'SasCsvToolkit' - A Versatile Parallel 'Bag-Of-Tasks' Job Submission

 Application on Heterogeneous and Homogeneous Platforms for Big Data

 Analytics such as for Biomedical Informatics

 Abhishek Narain Singh

 ABioTek www.tinyurl.com/abinarain, Kuopio, Finland

o. ActiviX: Non-Invasive Solution to Mental Health

 Morgan Whittemore, Shawn Toubeau, Zach Griffin, Leon Deligiannidis\*

 Department of Computer Science and Networking, Wentworth Institute

 of Technology, Boston, Massachusetts, USA

o. Using Artificial Intelligence for Medical Condition Prediction and

 Decision-Making For COVID-19 Patients

 Mohammad Pourhomayoun, Mahdi Shakibi\*

 Department of Computer Science, California State University,

 Los Angeles, California, USA

o. Semantic Tree Driven Thyroid Ultrasound Report Generation by

 Voice Input

 Lihao Liu\*, Mei Wang, Weiliang Zhao, Jian Yang, Xueyang Li

 School of Computer Science and Technology, Donghua University,

 Shanghai, P. R. China;

 Computing Department, Macquarie University, NSW, Australia

o. The Unmasking of 'Mitochondrial Adam' and Structural Variants Larger

 than Point Mutations as Stronger Candidates for Traits, Disease

 Phenotype and Sex Determination

 Abhishek Narain Singh

 ABioTek www.tinyurl.com/abinarain, Kuopio, Finland

o. Implementation of a Medical Data Warehouse Framework to

 Support Decisions

 Nedra Amara\*, Olfa Lamouchi, Said Gattoufi

 Institute of Management, University of Tunis, Bardo, Tunisia;

 LR-RISC-ENIT (LR-16-ES07), Tunisia

July 28

o. Post-Operative Hip Fracture Rehabilitation Model

 Akash Gupta\*, Adnan Al-Anbuky, Peter McNair

 School of Engineering, Computer and Mathematical Sciences,

 Auckland University of Technology, Auckland, New Zealand;

 School of Clinical Sciences, Auckland University of Technology,

 Auckland, New Zealand

o. Exergames for Systemic Sclerosis Rehabilitation: a Pilot Study

 Federica Ferraro, Marco Trombini\*, Matteo Morando, Marica Doveri,

 Gerolamo Bianchi, Silvana Dellepiane

 Department of Electrical, Electronic, Telecommunications

 Engineering and Naval Architecture (DITEN), Universita degli Studi

 di Genova, Genoa, Italy; Azienda Sanitaria Locale 3, Division of

 Rheumatology, Department of Locomotor System, Genoa, Italy

o. Classification of Craniosynostosis Images by Vigilant Feature

 Extraction

 Saloni Agarwal\*, Rami R. Hallac, Ovidiu Daescu, Alex Kane

 University of Texas at Dallas, Richardson, Texas, USA;

 UT Southwestern Medical Center, Dallas, Texas, USA

o. Using Persuasive AI Voice Assisted Technologies to Motivate and

 Encourage Physical Activity

 Benjamin Schooley, Dilek Akgun\*, Prashant Duhoon, Neset Hikmet

 Health Information Technology, University of South Carolina,

 Columbia, South Carolina, USA; Innovation Think Tank Lab,

 University of South Carolina, Columbia, South Carolina, USA;

 Department of Information Technology, University of South Carolina,

 Columbia, South Carolina, USA; Engineering & Computing, University

 of South Carolina, Columbia, South Carolina, USA

o. A Machine Learning Driven Approach to Predict the Outcome of

 Prostate Biopsy: Identifying Cancer, Clinically Significant Disease,

 and Unfavorable Pathological Features on Prostate Biopsy

 John L. Pfail\*, Dara J. Lundon, Parita Ratnani, Vinayak Wagaskar,

 Peter Wiklund, Ashutosh K. Tewari

 Icahn School of Medicine at Mount Sinai, New York, USA

o. Using Natural Language Processing to Optimize Engagement of Those

 with Behavioral Health Conditions That Worsen Chronic

 Medical Disease

 Peter Bearse, Atif Farid Mohammad, Intisar Rizwan I Haque\*,

 Susan Kuypers, Rachel Fournier

 Catasys Inc., Santa Monica, California, USA

o. Effects of Domain Randomization on Simulation-to-Reality Transfer

 of Reinforcement Learning Policies for Industrial Robots

 Christian Scheiderer\*, Nik Dorndorf, Tobias Meisen

 Institute of Technologies and Management of the Digital Transformation,

 University of Wuppertal, Germany; RWTH Aachen University, Germany

o. Growing Artificial Neural Networks

 John Mixter\*, Ali Akoglu

 ECE, The University of Arizona, Tucson, Arizona, USA

o. Hybrid Car Trajectory by Genetic Algorithms with Non-Uniform Key Framing

 Dana Vrajitoru

 Department of Computer and Information Sciences, Indiana University

 South Bend, Indiana, USA

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o. Food Type Recognition and Estimation of Calories Using Neural Network

 R. Dinesh Kumar, E. Golden Julie, Y. Harold Robinson, Sanghyun Seo\*

 School of Computer Art, College of Art and Technology,

 Chung-Ang University, Anseong-si, Kyunggi-do, Republic of Korea

o. A Hybrid Deep Learning Approach for Detecting and Classifying Breast

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 K. Lakshminarayanan, Y. Harold Robinson, S. Vimal, Dongwann Kang\*

 Department of Computer Science and Engineering, Seoul National

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o. A Deep Learning Approach to Diagnose Skin Cancer Using Image Processing

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 Nathaniel Ashby, Roozbeh Sadeghian\*

 Harrisburg University of Science and Technology, Harrisburg, PA, USA

o. White Blood Cell Classification Using Genetic Algorithm - Enhanced

 Deep Convolutional Neural Networks

 Omer Sevinc\*, Serdar Guzel, Iman Askerbeli, Mehrube Mehrubeoglu

 Ondokuz Mayis University, Samsun, Turkey; Ankara University, Ankara,

 Turkey; Texas A&M University-Corpus Christi, Texas, USA

o. Deep Learning Based Constituency Parsing for Arabic Language

 Amr Morad\*, Magdy Nagi, Sameh Alansary

 Information and Communication Technologies (ICT), Bibliotheca

 Alexandrina, Alexandria, Egypt; Faculty of Engineering, Computer

 and Systems Department, Alexandria University, Bibliotheca

 Alexandrina, Alexandria, Egypt; Arabic Computational Linguistic

 Center, Faculty of Arts, Phonetics and Linguistics Department,

 Alexandria University, Bibliotheca Alexandrina, Alexandria, Egypt

o. Activity Recognition for Elderly using Machine Learning Algorithms

 Heba Elgazzar

 School of Engineering and Computer Science, Morehead State

 University, Morehead, Kentucky, USA

o. Would You Turn on Bluetooth for LBA?

 Heng-Li Yang\*, Shiang-Lin Lin, Jui-Yen Chang

 Department of Management Information System, National Cheng-Chi

 University, Taipei, Taiwan

o. Prediction of Clinical Disease with AI based Multiclass

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 V. Jackins, S. Vimal, M. Kaliappan, Mi Young Lee\*

 Department of Software, Sejong University, Seoul, Republic of Korea

o. Trend Analysis using Agglomerative Hierarchical Clustering Approach

 for Time Series Big Data

 P. Subbulakshmi, S. Vimal, M. Kaliappan, Y. Harold Robinson, and

 Mucheol Kim\*

 School of Computer Science and Engineering, Chung-Ang University,

 Dongjak-gu, Seoul, Republic of Korea

o. Progression Detection of Glaucoma using K-Means and GLCM Algorithm

 S. Vimal, Y. Harold Robinson, M. Kaliappan, K. Vijayalakshmi, and

 Sanghyun Seo\*

 School of Computer Art, College of Art and Technology,

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o. Inside Blockchain and Bitcoin

 Fernandez-Vazquez S., Rosillo R.\*, Priore P., Fernandez I.,

 Gomez A., Parreno J.

 Escuela Politecnica de Ingenieria de Gijon, Campus de Viesques s/n,

 Gijon (Asturias), Spain

o. A Classifier of Popular Music Online Reviews: Joy Emotion Analysis

 Qing-Feng Lin, Heng-Li Yang\*

 National Cheng-Chi University, Taipei, Taiwan

o. Smart Marketing on Audio-visual content platforms - Intellectual

 Property Implications

 Elisa Gutierrez, Cristina Puente\*, Cristina Velasco, Jose A. Olivas

 Advanced Technical Faculty of Engineering - ICAI, Pontificia

 Comillas University, Madrid, Spain

o. Which Scaling Rule Applies to Artificial Neural Networks

 Janos Vegh

 Kalimanos BT, Debrecen, Hungary

o. Training-Data Generation and Incremental Testing for Daily Peak

 Load Forecasting

 Jihoon Moon, Sungwoo Park, Seungmin Jung, Eenjun Hwang\*, Seungmin Rho

 School of Electrical Engineering, Korea University, Seoul, Republic

 of Korea; Department of Software, Sejong University, Seoul,

 Republic of Korea

o. Improving Facial Landmark Extraction Performance using

 Attention Mechanism

 Hyungjoon Kim, Hyeonwoo Kim, Seongkuk Cho, Eenjun Hwang\*

 School of Electrical Engineering, Korea University, Seongbuk-gu,

 Seoul, Republic of Korea

o. A Person Re-identification Scheme Using Multiple Input Images and

 Cross-Input Neighborhood Differences

 Hyeonwoo Kim, Hyungjoon Kim, Bumyeon Ko, Eenjun Hwang\*

 School of Electrical Engineering, Korea University, Seongbuk-gu,

 Seoul, Republic of Korea

o. Autoencoder Based Anomaly Detection for Load Forecasting

 Sungwoo Park, Seungmin Jung, Eenjun Hwang\*, Seungmin Rho

 School of Electrical Engineering, Korea University, Seongbuk-gu,

 Seoul, Republic of Korea

o. Demand Response: Multi-agent System-based DR Implementation

 Faisal Saeed, Anand Paul, Seungmin Rho\*, Muhammad Jamal Ahmed

 Department Software, Sejong University, Gwangjin-gu, Seoul,

 Republic of Korea

o. T-SNE Based K-NN: A New Approach for MNIST

 Muhammad Jamal Ahmed, Faisal Saeed, Anand Paul, Seungmin Rho\*

 Department Software, Sejong University, Seoul, Republic of Korea

o. Short to Mid-Term Prediction for Electricity Consumption using

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 Malik Junaid Jami Gul, Malik Urfa gul, Yangsun Lee, Seungmin Rho\*,

 and Anand Paul

 Department Software, Sejong University, Seoul, Republic of Korea

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o. BI-LSTM-LSTM Based Time Series Electricity Consumption Forecast

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 Malik Junaid Jami Gul, M. Hafid Firmansyah, Seungmin Rho\*, and

 Anand Paul

 Department Software, Sejong University, Seoul, Republic of Korea

o. Comprehensive Performance Comparison between Flink and Spark

 Streaming for Real-Time Health Score Service in Manufacturing

 Seungchul Lee, Daeyoung Kim, Donghwan Kim

 Research, BISTel Inc., Republic of Korea

o. Discovery of Urban Mobility Patterns

 Ivan Dario Penaranda Arenas\*, Hugo Alatrista-Salas, and

 Miguel Nunez-del-Prado Cortez

 Pontificia Universidad Catolica del Peru

o. Deep Learning Approach to Extract Geometric Features of Bacterial

 Cells in Biofilms

 Md Hafizur Rahman\*, Jamison Duckworth, Shankarachary Ragi,

 Parvathi Chundi, Govinda Chilkoor, Venkata R. Gadhamshetty

 South Dakota School of Mines & Technology, South Dakota, USA

o. Novel Community Detection and Ranking Approaches for Social

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 Matin Pirouz\*, Pujitha Reddy

 California State University, Fresno, California, USA

o. Optimizing Network Intrusion Detection using Machine Learning

 Sara Nayak\*, Anushka Patil, Reethika Renganathan, and

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 SIES Graduate School of Technology, India

o. Air-Disturbance Direction Classification in Autonomous Quadcopters

 Jason Hughes

 Fordham University, USA

o. Data Analysis for Supporting Cleaning Schedule of Photovoltaic

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 Chung-Chian Hsu

 National Yunlin University of Science and Technology, Taiwan

o. Revealing the Relation between Students' Reading Notes and

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 Zhenyu Pan, Yang Gao\*, Tingjian Ge

 University of Massachusetts Lowell, Massachusetts, USA

o. Meta-Learning for Industrial System Monitoring via Multi-objective

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 Parastoo Kamranfar\*, Jeff Bynum, Amarda Shehu

 George Mason University, USA

o. Real-Time Spatiotemporal Air Pollution Prediction with Deep

 Convolutional LSTM through Satellite Image Analysis

 Pratyush Muthukumar, Mohammad Pourhomayoun, Emmanuel Cocom,

 Jeanne Holm, Dawn Comer, Anthony Lyons, Irene Burga, and

 Christa Hasenkopf

 California State University, Los Angeles, California, USA

o. A Network Traffic Reduction Method for Smart Dust IoT by

 Sensor Clustering

 Joonsuu Park, Keehyun Park\*

 Department of Computer Engineering, Keimyung University,

 Daegu, Republic of Korea

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o. The Implementation of Application for Comparison and Output of Fine

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 YunJung Lim, WoongSik Kim\*, Yongsuk Kim

 University of Konyang, Republic of Korea

o. A Self-adaptivity Indoor Ranging Algorithm Based on Channel State

 Information with Weight Grey Prediction Model

 Jingjing Wang\*, Joon Goo Park

 Electronics Engineering, Kyungpook National University, Daegu,

 Republic of Korea

o. A New Real-time Geolocation Tracking Tool Enhanced with

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 Erkan Meral, Mehmet Serdar Guzel, Omer Sevinc\*, Mehrube Mehrubeoglu

 Software Systems, Gazi University, Ankara, Turkey; Computer

 Engineering, Ankara University, Ankara Turkey; Computer Programming,

 Ondokuz Mayis University, Samsun, Turkey; Department of Engineering,

 Texas A&M University-Corpus Christi, Corpus Christi, Texas, USA

o. Data-driven Environmental Management: A Digital Prototype Dashboard

 to Analyze and Monitor the Precipitation on Susquehanna River Basin

 Siamak Aram\*, Maria H. Rivero, Nikesh Pahuja, Roozbeh Sadeghian,

 Joshua L. R. Paulino, Michael Meyer, James Shallenberger

 Harrisburg University School of Science and Technology, Harrisburg,

 PA, USA; Susquehanna River Basin Commission, Harrisburg, PA, USA

o. Do Sarcastic News and Online Comments Make Readers Happier?

 Jih-Hsin Tang\*, Chih-Fen Wei, Ming-Chun Chen, Chih-Shi Chang

 Department of Information Management, National Taipei University

 of Business, Taiwan

o. Content-Based Image Retrieval Using Deep Learning

 Tristan Jordan, Heba Elgazzar\*

 School of Engineering and Computer Science, Morehead State

 University, Morehead, Kentucky, USA

o. Application of Image Processing Tools for Scene-based Marine

 Debris Detection and Characterization

 Mehrube Mehrubeoglu\*, Farha Pulukool, Dekwaan Wynn,

 Lifford McLauchlan, Hua Zhang

 Department of Engineering, Texas A&M University-Corpus Christi,

 Texas, USA; Department of Computer Sciences, Texas A&M

 University-Corpus Christi, Texas, USA; Department of EECS,

 Texas A&M University-Kingsville, Texas, USA

o. Computer-aided Industrial Inspection of Vehicle Mirrors Using

 Computer Vision Technologies

 Hong-Dar Lin\*, Hsu-Hung Cheng

 Department of Industrial Engineering and Management,

 Chaoyang University of Technology, Taiwan

o. A Deep Learning Framework for Blended Distortion Segmentation

 in Stitched Images

 Hayat Ullah\*, Irfan Tahir, Kyungjin Han, Jong Weon Lee

 Department of Software Convergence, Sejong University, Seoul,

 Republic of Korea

o. Polyhedral Approximation for 3D Objects by Dominant Point Detection

 Miguel Vazquez-Martin del Campo\*, Cesar Omar Jimenez-Ibarra,

 Hermilo Sanchez-Cruz, Mario Alberto Rodriguez-Diaz

 Universidad Autonoma de Aguascalientes, Departamento de Ciencias

 de la Computacion, Mexico ITA, Mexico

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o. Axial Symmetry Detection Using AF8 Code

 Jimenez-Ibarra Cesar Omar\*, Vazquez-Martin del Campo Miguel, and

 Sanchez-Cruz Hermilo

 Universidad Autonoma de Aguascalientes, Departamento de Ciencias

 de la Computacion, Mexico

o. Automation of an Off-Grid Vertical Farming System to Optimize

 Power Consumption

 Otto Randolph, Bahram Asiabanpour\*

 Ingram School of Engineering, Texas State University,

 San Marcos, Texas, USA

o. Workflow for Investigating Thermodynamic, Structural and Energy

 Properties of Condensed Polymer Systems

 James Andrews\*, Estela Blaisten-Barojas

 Center for Simulation and Modeling and Department of Computational

 and Data Sciences, George Mason University, Fairfax, Virginia, USA

o. Prototype of MANET Network with Ring Topology for Mobile Devices

 Ramses Fuentes-Perez, Erika Hernandez-Rubio, Diego D. Flores-Nogeira,

 and Amilcar Meneses-Viveros\*

 Instituto Politecnico Nacional-ESCOM, Mexico; Instituto Politecnico

 Nacional, SEPI-ESCOM. Mexico; Departamento de Computacion,

 Cinvestav-IPN, Mexico

o. Toward a Numerically-Robust and Efficient Implicit Integration

 Scheme for Parallel Power Grid Dynamic Simulation Development

 in GridPACK

 Shuangshuang Jin\*, Shrirang G. Abhyankar, Bruce J. Palmer,

 Renke Huang, Wiliam A. Perkins, Yousu Chen

 School of Computing, Clemson University, North Charleston,

 South Carolina, USA; Optimization and Control Group, Pacific

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 High Performance Computing, Pacific Northwest National Labtoratory,

 Richland, Washington, USA; Electricity Infrastructure, Pacific

 Northwest National Laboratory, Richland, Washington, USA;

 Hydrology Group, Pacific Northwest National Labtoratory, Richland,

 Washington, USA

o. Directive-based Hybrid Parallel Power System Dynamic Simulation

 on Multi-Core CPU and Many-Core GPU Architecture

 Cong Wang\*, Shuangshuang Jin, Yousu Chen

 School of Computing, Clemson University, North Charleston,

 South Carolina, USA; Electricity Infrastructure, Pacific Northwest

 National Laboratory, Richland, Washington, USA

o. Composition of Parent-Child Cyberattack Models

 Katia P. Maxwell\*, Mikel D. Petty, Tymaine S. Whitaker,

 Walter A. Cantrell, C. Daniel Colvett

 Department of Mathematical, Computing and Natural Sciences,

 Athens State University, Athens, Alabama, USA; Department of

 Computer Science, University of Alabama in Huntsville,

 Huntsville, Alabama, USA; College of Computing and Technology,

 Lipscomb University, Nashville, Tennessee, USA; Department of

 Systems Engineering, University of Alabama in Huntsville,

 Huntsville, Alabama, USA

o. Improving Analysis in SPMD Applications for Performance Prediction

 Felipe Tirado\*, Alvaro Wong, Dolores Rexachs, Emilio Luque

 Computer Architecture and Operating System Department,

 Universidad Autonoma de Barcelona, Barcelona, Spain;

 Departamento de Computacion e Industrias, Universidad Catolica

 del Maule, Talca, Chile

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o. A Comprehensive Survey on Fingerprint Liveness Detection Algorithms

 by Database and Scanner Model

 Riley Kiefer, Ashok Patel\*

 Department of Computer Science, Florida Polytechnic University,

 Lakeland, Florida, USA

o. Automotive Vehicle Security Metrics

 Guillermo A. Francia, III

 Center for Cybersecurity, University of West Florida, Pensacola,

 Florida, USA

o. An Analysis of Applying STIR/Shaken to Prevent Robocalls

 James Yu

 DePaul University, Chicago, Illinois, USA

o. A Practice of Detecting Insider Threats within a Network

 David Velez, Harry Staley, Navin Mathew, Daniel De Leon II, and

 Jeong Yang\*

 Department of Computing and Cyber Security,

 Texas A&M University - San Antonio, Texas, USA

o. Towards Home Area Network Hygiene: Device Classification and

 Intrusion Detection for Encrypted Communications

 Blake A. Holman, Joy Hauser, George T. Amariucai

 Kansas State University, Manhattan, Kansas, USA

o. A Hybrid AI and Simulation-Based Optimization DSS for

 Post-Disaster Logistics

 Gonzalo Barbeito, Dieter Budde, Maximilian Moll, Stefan Pickl,

 and Benni Thiebes

 Fakulat fur Informatik, Universitat der Bundeswehr Muchen,

 Germany; German Committee for Disaster Reduction (DKKV),

 Bonn, Germany

o. Secure-Stor: A Novel Hybrid Secure Edge Server Architecture and

 CDN to Enhance the Security and Response Time for Edge Devices

 Mais Nijim, Raghavar Reddy, Muhammad Aurangzeb

 Electrical Engineering and Computer Science Department,

 Texas A&M University-Kingsville, Texas, USA

o. Intrusion Detection through Gradient in Digraphs

 S. S. Varre, Mais Nijim, Muhammad Aurangzeb

 EECS Department, Texas A&M University-Kingsville, Texas, USA

o. Statistical Analysis of Prime Number Generators Putting

 Encryption at Risk

 Aykan Inan

 University of Applied Sciences Ravensburg-Weingarten,

 Baden-Wurttemberg, Germany

o. Static Analysis for Software Reliability and Security

 Hongjun Choi, Dayoung Kang, Jin-Young Choi\*

 School of Cybersecurity, Korea University, Seoul, Republic of Korea

o. Chor-Rivest Knapsack Cryptosystem in a Post-Quantum World

 Raul Duran Diaz, Luis Hernandez Encinas\*, Agustin Martin Munoz,

 and Araceli Queiruga Dios

 Departamento de Automatica, Universidad de Alcala, Alcala de

 Henares, Spain; Consejo Superior de Investigaciones Cientificas

 (CSIC), Madrid, Spain; Departamento de Matematica Aplicada,

 Universidad de Salamanca, Salamanca, Spain

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o. Enhancing the Cybersecurity Education Curricula Through

 Quantum Computation

 Hisham Albataineh, Mais Nijim

 Department of Physics and Geoscience, Texas A&M University-

 Kingsville, Texas, USA; Department of EECS, Texas A&M

 University-Kingsville, Texas, USA

o. Secure Authentication Protocol for Drones in LTE Networks

 Dayoung Kang, Gyuhong Lee, Jin-Young Choi

 The Graduate School of Information Security, Korea University, Korea;

 The Department of Cyber-warfare, Korea Army Academy at Yeongcheon, Korea;

 The Graduate School of Information Security, Korea University, Korea

o. Mixed-integer Linear Programming Models for the Simultaneous

 Unloading and Loading Processes in a Maritime Port

 Ali Skaf\*, Sid Lamrous, Zakaria Hammoudan, Marie-Ange Manier

 Univ. Bourgogne Franche-Comte, FEMTO-ST Institute/CNRS,

 (UTBM), Belfort, France

o. A Dynamic Scaling Methodology for Improving Performance of

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 Nashmiah Alhamdawi, Yi Liu\*

 Department of EECS, South Dakota State University, Brookings,

 South Dakota, USA; Department of Computer and Information Science,

 University of Massachusetts Dartmouth, Massachusetts, USA

o. Implications of Blockchain Technology in the Health Domain

 Merve Vildan Baysal, Ozden Ozcan-Top, Aysu Betin Can\*

 The Scientific and Technological Research Council of Turkey,

 Ankara, Turkey; Information Systems, Middle East Technical

 University, Ankara, Turkey

o. A Preliminary Study of Transactive Memory System and Shared

 Temporal Cognition in the Collaborative Software Process Tailoring

 Pei-Chi Chen, Jung-Chieh Lee, Chung-Yang Chen\*

 Trend Micro Inc., Texas, USA; Beijing Normal University Zhuhai,

 Zhuhai City, P. R. China; Department of Information Management,

 National Central University, Taoyuan city, Taiwan

o. Analyzing Technical Debt of a CRM Application by Categorizing

 Ambiguous Issue Statements

 Yasemin Doganci\*, Ozden Ozcan-Top, Altan Kocyigit

 Information Systems Department, Graduate School of Informatics,

 Middle East Technical University, Ankara, Turkey

o. Melody Based Pitch Correction Model for a Voice-Driven

 Musical Instrument

 John Carelli

 Computer Science and Information Technology, Kutztown University

 of Pennsylvania, Kutztown, Pennsylvania, USA

o. A Framework for Developing Custom Live Streaming Multimedia Apps

 Abdul-Rahman Mawlood-Yunis

 Physics and Computer Science Department, Wilfrid Laurier

 University, Waterloo, Canada

LIST OF BOOKS TO BE PUBLISHED

All accepted papers whose authors follow the instructions (the

instructions appeared in the NOTIFICATION OF ACCEPTANCE - already

emailed to the authors) will be published by Springer Nature.

Refer to the list of books below for more details. We anticipate

to have the books published around October/November 2020.

SPRINGER BOOK SERIES:

 Transactions on Computational Science & Computational Intelligence

 https://www.springer.com/series/11769

 ISSN: 2569-7072

TITLES TO BE PUBLISHED IN THE ABOVE BOOK SERIES:

 -> Advances in Data Science and Information Engineering

 Springer ID: 89066304 (Book ID: 495582\_1\_En)

 (Accepted papers of ICDATA 2020, IKE 2020)

 Editors: Dr. Robert Stahlbock, Dr. Gary M. Weiss,

 Dr. Mahmoud Abou-Nasr, Prof. Cheng-Ying Yang,

 Prof. Hamid R. Arabnia, Prof. Leonidas Deligiannidis

 -> Advances in Security, Networks, and Internet of Things

 Springer ID: 89066305 (Book ID: 495583\_1\_En)

 (Accepted papers of SAM 2020, ICWN 2020, ICOMP 2020, ESCS 2020)

 Editors: Prof. Kevin Daimi, Prof. Hamid R. Arabnia,

 Prof. Leonidas Deligiannidis, Prof. Min-Shiang Hwang,

 Prof. Fernando G. Tinetti

 -> Advances in Software Engineering, Education, and e-Learning

 Springer ID: 89066306 (Book ID: 495584\_1\_En)

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 Editors: Prof. Hamid R. Arabnia Prof. Leonidas Deligiannidis,

 Prof. Fernando G. Tinetti, Prof. Quoc-Nam Tran

 -> Advances in Artificial Intelligence & Applied Cognitive Computing

 Springer ID: 89066307 (Book ID: 495585\_1\_En)

 (Accepted papers of ICAI 2020, ACC 2020)

 Editors: Prof. Hamid R. Arabnia, Dr. Ken Ferens,

 Prof. David de la Fuente, Dr. Elena B. Kozerenko,

 Prof. Jose Angel Olivas Varela, Prof. Fernando G. Tinetti

 -> Advances in Parallel & Distributed Processing, and Applications

 Springer ID: 89066309 (Book ID: 495587\_1\_En)

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 -> Advances in Computer Vision and Computational Biology

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