

INTERNATIONAL CONFERENCE ON DATA ANALYTICS FOR BUSINESS AND INDUSTRY

26-27 OCTOBER 2020, KINGDOM OF BAHRAIN



WAY TOWARDS A SUSTAINABLE ECONOMY

TECHNICALLY SPONSORED BY



ORGANIZED BY



IN COLLABORATION WITH



4 QUALITY EDUCATION



8 DECENT WORK AND ECONOMIC GROWTH



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



17 PARTNERSHIPS FOR THE GOALS



ICDABI Microsoft Teams



SCAN ME

INTRODUCTION



The **International Conference on Data Analytics for Business and Industry** aims to provide an excellent international platform to researchers, data scientists, business managers, and industry practitioners to meet and exchange their ideas and novel approaches to the technical challenges of a data driven world. It provides a premier interdisciplinary forum for sharing knowledge and discussing the most recent innovations, trends, and practical challenges encountered and solutions in the wide fields of big data and data analytics emerging in all business and industrial sectors. Integrating sophisticated business analytics in the internal operational processes for marketing, sales, management, designing strategies, etc. can play a powerful role in developing any business sector through increasing its efficiency, supporting its decision-making under uncertainty, and improving its business operations, in today's competitive market.

TRACKS

BIG DATA

DATA MINING

E-COMMERCE

OPTIMIZATION

DATA SCIENCE

RISK ANALYSIS

DATA ANALYTICS

CLOUD COMPUTING

SECURITY ANALYSIS

DATA VISUALIZATION

BUSINESS ANALYTICS

FINANCIAL ANALYTICS

INSURANCE STATISTICS

PATTERN RECOGNITION

PROJECT MANAGEMENT

BUSINESS INTELLIGENCE

WOMEN IN DATA SCIENCE

STATISTICS IN IT INDUSTRIES

SUPPLY CHAIN MANAGEMENT

APPLICATIONS OF DATA SCIENCE

ENERGY SYSTEMS AND EFFICIENCY

QUALITY CONTROL AND RELIABILITY

IMAGE ANALYSIS AND TOMOGRAPHY

STATISTICAL AND FINANCIAL MODELING

BIOINFORMATICS AND HEALTH POLICY DECISION MAKING

ARTIFICIAL INTELLIGENCE FOR BUSINESS AND INDUSTRY

UNIVERSITY OF BAHRAIN IN NUMBERS



UOB RANKED

#01 IN BAHRAIN

TOP 4% GLOBALLY

#23 IN THE ARAB REGION

#17 FOR CITATIONS PER PAPER

#28 FOR ACADEMIC REPUTATION

#40 FOR INTERNATIONAL RESEARCH NETWORK

TOP 2% FOR EMPLOYER REPUTATION GLOBALLY

#15 IN THE MENA REGION FOR EMPLOYER REPUTATION

AGENDA – DAY1: 26 OCTOBER 2020

08:00 – 09:00	TECHNICAL SUPPORT									
09:00 – 09:05	VIRTUAL MAIN HALL	UOB DOCUMENTARY VIDEO								
09:05 – 09:10		OPENING CERMONY: PROF. RIYAD HAMZAH – UNIVERSITY OF BAHRAIN PRESIDENT								
09:10 – 09:15		OPENING CERMONY: DEANSHIP OF GRADUATE STUDIES & SCIENTIFIC RESEARCH								
09:15 – 09:20		OPENING CERMONY: CONFERENCE STEERING COMMITTEE								
09:20 – 09:30		BREAK								
09:30 – 10:00	VIRTUAL MAIN HALL	KEYNOTE SPEAKER 1: PROF. FABRIZIO RUGGERI								
10:00 – 10:30		KEYNOTE SPEAKER 2: PROF. NALINI RAVISHANKER								
10:30 – 11:00		KEYNOTE SPEAKER 3: PROF. DAVID BANKS								
11:00 – 11:30		KEYNOTE SPEAKER 4: PROF. DANIEL JESKE								
11:30 – 11:35		VIRTUAL HONOURING OF CONFERENCE KEYNOTE SPEAKERS								
11:35 – 12:00	BREAK									
12:00 – 12:20	VIRTUAL ROOM 1A	VIRTUAL ROOM 1B	VIRTUAL ROOM 1C	VIRTUAL ROOM 1D	VIRTUAL ROOM 1E	VIRTUAL ROOM 1F	VIRTUAL ROOM 1G	VIRTUAL ROOM 1H	VIRTUAL ROOM 1I	VIRTUAL ROOM 1J
12:20 – 12:40										
12:40 – 13:00										
13:00 – 13:20										
13:20 – 13:40										
13:40 – 14:00										
14:00 – 14:10	BREAK									
14:10 – 14:30	VIRTUAL ROOM 2A	VIRTUAL ROOM 2B	VIRTUAL ROOM 2C	VIRTUAL ROOM 2D	VIRTUAL ROOM 2E	VIRTUAL ROOM 2F	VIRTUAL ROOM 2G	VIRTUAL ROOM 2H	VIRTUAL ROOM 2I	VIRTUAL ROOM 2J
14:30 – 14:50										
14:50 – 15:10										
15:10 – 15:30										
15:30 – 15:50										
15:50 – 16:10										

AGENDA – DAY2: 27 OCTOBER 2020

08:00 – 09:00

TECHNICAL SUPPORT

09:00 – 09:30

[INDUSTRIAL TALK](#)

GULF BUSINESS MACHINES

TRUST HARD TO BUILD AND EASY TO BREAK - "ROLE OF ETHICS IN AI MODELS"

09:30 – 09:40

BREAK

09:40 – 12:00

[WORKSHOP](#)

DEEP LEARNING WITH WEKA

FROM INSTALLATION TO APPLICATIONS

12:00 – 12:30

CLOSING REMARKS

KEYNOTE SPEAKERS



PROF. FABRIZIO RUGGERI

He is Research Director at CNR-IMATI (National Research Council – Institute of Applied Mathematics and Information Technology), Milano, Italy, Adjunct Professor at QUT, Brisbane, Australia, and faculty in Ph.D. programs (Mathematics, Pavia-Milano Bicocca, Italy, and Statistics, Valparaíso, Chile). His main research interests are Bayesian and industrial statistics. He is Vice President of the International Statistical Institute (ISI), former President of the European Network for Business and Industrial Statistics (ENBIS) and the International Society for Bayesian Analysis (ISBA), and President of the International Society for Business and Industrial Statistics (ISBIS). He authored over 100 articles and 5 books. He is Editor-in-Chief of Applied Stochastic Models in Business and Industry and Wiley StatsRef. He is Fellow of ISBA and American Statistical Association (ASA), Honorary Member of ENBIS and Zellner Medal's recipient.



PROF. NALINI RAVISHANKER

She is professor in the Department of Statistics at the University of Connecticut (UConn), Storrs. Her current research interests include time series and times-to-events analysis, Bayesian dynamic modelling, signal processing, and predictive inference. Her primary interdisciplinary research involves problems in finance, marketing, and transportation engineering. She has an undergraduate degree in statistics from Presidency College, Chennai, India, and a PhD in statistics and operations research from the Stern School of Business, New York University. She has over 100 publications, has co-authored a textbook A First Course in Linear Model Theory, and is co-editor of the Handbook of Discrete-Valued Time Series, both published by Chapman & Hall/CRC. She is a fellow of the American Statistical Association, an elected member of the International Statistical Institute, and an elected member of the CT Academy of Science and Engineering. She served as President of the International Society for Business and Industrial Statistics (ISBIS) 2017-2019 and as the VP for Education Outreach for the New England Statistics Society (NESS) 2017-2020. She has served as the theory and methods editor of Applied Stochastic Models in Business and Industry, and as an associate editor for The American Statistician. She is currently co-editor-in-chief of the International Statistical Review and an associate editor for the Journal of Forecasting, Chilean Journal of Statistics and Annals of Science and Technology. She has offered several in-person and virtual workshops on R and time series analysis. She serves as the faculty coordinator in Statistics for UConn's Early College Experience (ECE) concurrent enrolment program for CT high schools and has been involved in UConn's pre-college summer programs for high school students.

KEYNOTE SPEAKERS



PROF. DAVID BANKS

He is the Director of the Statistical and Applied Mathematics Institute, and a professor in the Department of Statistical Science at Duke University. He obtained his PhD in statistics from Virginia Tech in 1984, then did a two-year postdoctoral fellowship at the University of California at Berkeley. He taught at Carnegie Mellon University and the University of Cambridge, was chief statistician at the U.S. Department of Transportation, and also worked at the National Institute of Standards and Technology and at the Food and Drug Administration. He is a former editor of the Journal of the American Statistical Association and a founding editor of Statistics and Public Policy. He works in risk analysis, dynamic models for text networks, human rights statistics, and some aspects of machine learning.



PROF. DANIEL JESKE

He is a Professor in the department of statistics at the University of California, Riverside (USA), where he served as the department chair during 2008-2015. He is also a Vice-Provost of Academic Personnel at UCR. He is an elected fellow of the American Statistical Association and served on the board of directors during 2014-2016. He is the Vice-President of Membership and President-Elect for the International Society of Business and Industrial Statistics (ISBIS), a society of the International Statistical Institute (ISI). He is the current Editor-in-Chief of The American Statistician and is the Chair of the Program Affiliates Committee of the National Institute of Statistical Sciences. His research interests include classification and prediction methodologies, statistical process control methodologies, biostatistics applications, and reliability modelling.

CONFERENCE PAPERS

VIRTUAL ROOM 1A



12:00 – 14:00

PROJECT MANAGEMENT

Critical Success Factors as Antecedents of Sustainability in Higher Education Institutions in Emerging Economies: The Case of Bahrain

Abdelansser Taha Ibrahim Mohamed; Salah Abdelhafeez Mostafa Ali;
Abdelmoneim Bahyeldin Mohamed Metwally

PROJECT MANAGEMENT

A STUDY OF USER STORY IN PRACTICE

Prabhat Pokharel; Pramesh Vaidya

STATISTICAL & FINANCIAL MODELLING

A META-ANALYSIS OF FOREIGN DIRECT INVESTMENT AND ECONOMIC GROWTH: AN EMPIRICAL EVIDENCE FROM PAKISTAN DURING COVID 19 POLICY MAKING

Asma Khalid; Muhammad Hamdan Tahir; Hafiz Muhammad Bilal Asghar;
Mubbasher Munir; Noman Arshed; Hafeez Rehman

STATISTICAL & FINANCIAL MODELLING

A NEW GENERALIZATION OF DAGUM DISTRIBUTION WITH AN APPLICATION TO FINANCIAL DATA SETS

Aliyu Ismail Ishaq

STATISTICAL & FINANCIAL MODELLING

FORECASTING A FIRM'S POSITION BASED ON PITROSKI'S F-SCORE USING ARIMA

Ajinkya Chaudhari; Parag Ghorpade

STATISTICAL & FINANCIAL MODELLING

COUNTER-CYCLICAL MONETARY POLICY FOR OVERCOMING COVID 19 INDUCED RECESSION BY INTRODUCING INCENTIVE BASED DIGITAL CURRENCY

Mohammad Selim

CONFERENCE PAPERS

VIRTUAL ROOM 1B



12:00 – 14:00

E-COMMERCE

IMPACT OF E-COMMERCE ON BAHRAIN'S ECONOMY: A TIME SERIES ANALYSIS

Ishaq Mohammad Salam Khattak; Muhammad Abrar ul Haq; Farheen Akram; Hafiz Abid Mahmood Malik

E-COMMERCE

PREDICTING REPURCHASE INTENTION USING TEXTUAL FEATURES OF ONLINE CUSTOMER REVIEWS

Dedy Suryadi

E-COMMERCE

UML MODELING OF ONLINE PUBLIC BUS RESERVATION SYSTEM IN EGYPT

Ayman R. Mohammed; Sally Kassem

E-COMMERCE

FACTORS INFLUENCING CONSUMERS' ELECTRONIC WORD-OF-MOUTH (EWOM) INTENTION AMONG GENERATION Y (GEN Y) TOWARDS TRAVEL DESTINATIONS

Nurul Aida Harun; Norazamimah Bogal; Masliana Tamrin; Surya Ahmad Royali

E-COMMERCE

PROPOSED MOBILE APPLICATION FOR ISLAMIC FINTECH E-SALAM SYSTEM AN APPROACH TO THE FINANCIAL INCLUSION

Mohammad Allaymoun; Omer Awad Hag Hamid

E-COMMERCE

THE SYNERGIC RELATIONSHIP BETWEEN E-COMMERCE AND SENTIMENT ANALYSIS: A CONTENT ANALYSIS OF PUBLISHED ARTICLES BETWEEN 2007 AND 2020

Mariano Alberto Casas-Valadez; Alberto Faz-Mendoza; Cesar Esau Medina; Rodrigo Castañeda-Miranda; Nadia Karina Gamboa-Rosales; José Ricardo López-Robles

CONFERENCE PAPERS

VIRTUAL ROOM 1C



12:00 – 14:00

APPLICATIONS OF DATA SCIENCE

COMPARING ARTIFICIAL PANCREAS CONTROLLED BY HYBRID "CLOSED-LOOP" MACHINE LEARNING (ML) TRAINED ALGORITHM TO MULTI-DAILY INJECTION (MDI), INSULIN PUMP WITHOUT CGM AND "SENSOR ASSISTED" INSULIN PUMP THERAPIES FOR DT1 TREATMENT

Joan Carles Peiro

APPLICATIONS OF DATA SCIENCE

INCREMENTAL OUTLIER DETECTION IN AIR QUALITY DATA USING STATISTICAL METHODS

Santosh Kumar

APPLICATIONS OF DATA SCIENCE

ELEARNING BASED BOOK RECOMMENDATION USING COLLABORATIVE FILTERING AND SEQUENTIAL PATTERN MINING

Taushif Anwar; V Uma; Shahjad A

APPLICATIONS OF DATA SCIENCE

ANN BASED CRIME DETECTION AND PREDICTION USING TWITTER POSTS AND WEATHER DATA

Chamith Sanadagiri; Banage Kumara; Banujan Kuhaneswaran

APPLICATIONS OF DATA SCIENCE

ASSESSING THE IMPACT OF TEXT PREPROCESSING IN SENTIMENT ANALYSIS OF SHORT SOCIAL NETWORK MESSAGES IN THE RUSSIAN LANGUAGE

Egor Araslanov; Evgeniy Komotskiy; Ebenezer Agbozo

BIG DATA

TWEETS SENTIMENT ANALYSIS DURING COVID-19 PANDEMIC

Maha Ali Alanezi; Nabil Hewahi

CONFERENCE PAPERS

VIRTUAL ROOM 1D



12:00 – 14:00

DATA ANALYTICS

DATA ANALYTICS AND SME PERFORMANCE: A BIBLIOMETRIC ANALYSIS

Muzaffar Asad; Naveed Altaf; Aqeel Israr; Ghias ul Hassan Khan

DATA ANALYTICS

INVESTMENT IN HUMAN CAPITAL TO PROMOTE THE KNOWLEDGE-BASED ECONOMY: DATA ANALYSIS IN THE GCC

Saeed Aldulaimi; Radwan Kharabsheh; Amer Al shishany; Abdulsattar Alazzawi

DATA SCIENCE

INDONESIAN SENTIMENT ANALYSIS: AN EXPERIMENTAL STUDY OF FOUR KERNEL FUNCTIONS ON SVM ALGORITHM WITH TF-IDF

Pulung Hendro Prastyo

DATA SCIENCE

COMPARING NAÏVE BAYES, DECISION TREE AND LOGISTIC REGRESSION METHODS IN FRAUDULENT CREDIT CARD TRANSACTIONS

Maha Ali Alanezi; Zahra Mohamed; Marwa Homeed; Ahmed M. Zeki

DATA SCIENCE

BLOCKCHAIN APPLICATION IN MASS CUSTOMIZATION: A FURNITURE SECTOR EXAMPLE

Nursena Baygin; Mehmet Baygin; Mehmet Karakose

DATA SCIENCE

FACE MASK DETECTION USING MOBILENETV2 IN THE ERA OF COVID-19 PANDEMIC

Samuel Ady Sanjaya; Suryo Adi Rakhmawan

CONFERENCE PAPERS

VIRTUAL ROOM 1E



12:00 – 14:00

ARTIFICIAL INTELLIGENCE FOR BUSINESS & INDUSTRIAL DATA

IMAGE CLASSIFICATION USING CONVOLUTION NEURAL NETWORK BASED HASH ENCODING AND PARTICLE SWARM OPTIMIZATION

Sameer I. Ali Al-janabi; Sufyan T Faraj Al-Janabi; Belal Al-Khateeb

ARTIFICIAL INTELLIGENCE FOR BUSINESS & INDUSTRIAL DATA

ARTIFICIAL INTELLIGENCE IN BANKING SECTOR: EVIDENCE FROM BAHRAIN

Yomna Abdulla; Rabab Ebrahim; Sumathi Kumaraswamy

ARTIFICIAL INTELLIGENCE FOR BUSINESS & INDUSTRIAL DATA

GENDER CLASSIFICATION AND AGE PREDICTION USING CNN AND RESNET IN REAL-TIME

Asad Mustafa; Kevin Meehan

ARTIFICIAL INTELLIGENCE FOR BUSINESS & INDUSTRIAL DATA

ARTIFICIAL INTELLIGENCE AND DIGITAL TRANSFORMATION IN SUPPLY CHAIN MANAGEMENT A CASE STUDY IN SAUDI COMPANIES

Yousif Mohammed Alsharidah; Abdulsattar Alazzawi

BUSINESS INTELLIGENCE

A LITERATURE REVIEW OF ORGANIZATIONAL CULTURAL DRIVERS AFFECTING THE DIGITAL TRANSFORMATION OF THE BANKING SECTOR

Marwa Al-Faihani; Adel Al-Alawi

BUSINESS INTELLIGENCE

ANALYSIS OF BUSINESS INTELLIGENCE IMPACT ON ORGANIZATIONAL PERFORMANCE

Shahnawaz Khan; Mohammed Redha Qader; Thirunavukkarasu Kannapiran; Satheesh Abimannan

CONFERENCE PAPERS

VIRTUAL ROOM 1F



12:00 – 14:00

IMAGE ANALYSIS & TOMOGRAPHY

A REVIEW OF CONDITION MONITORING AND FAULT DIAGNOSIS AND DETECTION OF ROTATING MACHINERY BASED ON IMAGE ASPECTS

Omar AlShorman; Mahmoud Saleh Masadeh; Fahed Alkahtani; Ahmad M. Alshorman

IMAGE ANALYSIS & TOMOGRAPHY

COVID-19 DETECTION USING DEEP LEARNING METHODS

Mehmet Sevi; Ilhan Aydin

OPTIMIZATION

MODELING AND IMPLEMENTATION OF AN AUTOMATIC DRIP IRRIGATION SYSTEM

Sodessa Soma Shonkora; Ayodeji Olalekan Salau

PATTERN RECOGNITION

HYBRID CLASSIFICATION METHOD TO DETECT THE PRESENCE OF HUMAN IN A SMART BUILDING ENVIRONMENT

Nurul Farzana Ahmad Mahmud; Nor Azuana Ramli

PATTERN RECOGNITION

MEASURING ENGAGEMENT LEVEL IN CHILD-ROBOT INTERACTION USING MACHINE LEARNING BASED DATA ANALYSIS

George Sidiropoulos; George A Papakostas; Chris Lytridis; Christos Bazinas;
Vassilis Kaburlasos; Efi Kourampa; Elpida Karageorgiou

PATTERN RECOGNITION

HANDWRITING BASED PERSONALITY IDENTIFICATION USING TEXTURAL FEATURES

Abdellatif Gahmousse; Chawki Djeddi; Abdeljalil Gattal; Imran Siddiqi

CONFERENCE PAPERS

VIRTUAL ROOM 1G



12:00 – 14:00

BIOINFORMATICS & HEALTH POLICY DECISION MAKING

EMULATION OF A HAEMORRHAGE REMOVAL ROBOT USED DURING NEUROSURGICAL TREATMENT OF GLIOMA

Munyaradzi Charles Rushambwa; Mavis Gezimati; Richa Kushwaha;
Rajkumar Palaniappan; Govindaraj P; Fizza Ghulam Nabi

BIOINFORMATICS & HEALTH POLICY DECISION MAKING

DT-CWPT BASED ENTROPIES FOR VOCAL FOLD PATHOLOGY DETECTION

Farah Nazlia Che Kassim; Vikneswaran Vijean; Hariharan Muthusamy;
Zulkapli Abdullah; Rokiah Abdullah; Rajkumar Palaniappan

BIOINFORMATICS & HEALTH POLICY DECISION MAKING

MONITORING OF PROLONGED AND ASYMMETRICAL POSTURE TO IMPROVE SITTING BEHAVIOR

Md Arif Reza Anwary; Michael Vassallo; Abdelhamid Bouchachia

BIOINFORMATICS & HEALTH POLICY DECISION MAKING

CLASSIFICATION OF EPILEPTIC SEIZURES USING ARTIFICIAL NEURAL NETWORK WITH ADAPTIVE MOMENTUM

Alaa Ali Hameed; Akhtar Jamil; Naim Mahmood Musleh Ajlouni;
Jawad Rasheed; Adem Özyavaş; Zeynep Orman

BIOINFORMATICS & HEALTH POLICY DECISION MAKING

HAND IMAGE-BASED HUMAN AGE ESTIMATION USING A TIME DISTRIBUTED CNN-GRU

Ibrahim Guelzim; Mohammed Ait Abderrahmane; Abdelkafer Ait Abdelouahad

BIOINFORMATICS & HEALTH POLICY DECISION MAKING

EARLY DETECTION OF ALZHEIMER DISEASES BASED ON SINGLE NUCLEOTIDE POLYMORPHISMS (SNPS) ANALYSIS AND MACHINE LEARNING TECHNIQUES

Hala Ahmed; Hassan Soliman; Mohammed M. Elmogy

CONFERENCE PAPERS

VIRTUAL ROOM 1H



12:00 – 14:00

ARTIFICIAL INTELLIGENCE FOR BUSINESS & INDUSTRIAL DATA

AUTOMATED CENSORABLE CONTENT IDENTIFICATION IN VIDEOS USING DEEP LEARNING

Arul Treesa Mathew; Chenju Thomas; Akhil Krishnan; U Ganesh; Sneha Saibu; Thasni Salim

ARTIFICIAL INTELLIGENCE FOR BUSINESS & INDUSTRIAL DATA

DECISION MAKING USING INTERNET OF THINGS AND MACHINE LEARNING: A BIBLIOMETRIC APPROACH TO TRACKING MAIN RESEARCH THEMES

Nadia Karina Gamboa-Rosales; Andrea Castorena-Robles; Mariano Alberto Casas-Valadez;
Manuel Jesus Cobo; Rodrigo Castañeda-Miranda; José Ricardo López-Robles

ARTIFICIAL INTELLIGENCE FOR BUSINESS & INDUSTRIAL DATA

RISK BASED PAYMENT INTEGRITY EVALUATION

Tahir Ekin; Greg LaKowski

QUALITY CONTROL & RELIABILITY

A NEW FAMILY OF SKEW-NORMAL LIFETIME DISTRIBUTIONS FOR INDUSTRIAL APPLICATIONS

Eman Khorsheed; Hugo Salinas; Hassan Bakouch

QUALITY CONTROL & RELIABILITY

A MACHINE LEARNING-BASED ERROR MODEL FOR QUALITY CONTROL OF FUNCTIONAL APPROXIMATE COMPUTING

Mahmoud Saleh Masadeh; Omar AlShorman; Adam Alhawari

QUALITY CONTROL & RELIABILITY

ANALYSIS OF A WARRANTY-BASED QUALITY MANAGEMENT SYSTEM IN THE CONSTRUCTION INDUSTRY

Mohammad Nagahisarchoghaei; Justin Dodd; Morteza Nagahi; Ghodsieh Ghanbari; Sujan Poudyal

CONFERENCE PAPERS

VIRTUAL ROOM 1 I



12:00 – 14:00

BIG DATA

ANALYSIS ON POWER OUTAGE BY USING BIG DATA ANALYTICS

Rosfarahanun Ali; Nor Azuana Ramli; Lilik J. Awaln

SECURITY ANALYSIS

HYBRID INTRUSION DETECTION SYSTEM BASED ON DEEP LEARNING

Ali Azawii Abdul Lateef; Sufyan T Faraj Al-Janabi; Belal Al-Khateeb

SECURITY ANALYSIS

NONPARAMETRIC KULLBACK-LEIBLER DISTANCE-BASED METHOD FOR NETWORKS INTRUSION DETECTION

Bouyeddou Benamar; Harrou Fouzi

SECURITY ANALYSIS

ANALYSIS OF SOFTWARE VULNERABILITIES USING EXPLORATORY DATA ANALYSIS (EDA)

Raguvir S; Shekar Babu

SECURITY ANALYSIS

DIGITAL FORENSIC EVIDENCE - THE MISSING LINK IN THREAT MODELING

Asif Iqbal; Johannes Olegård; Ranjana Ghimire

SECURITY ANALYSIS

THE CYBER SECURITY IN THE AGE OF TELEWORK: A DESCRIPTIVE RESEARCH FRAMEWORK TROUGH SCIENCE MAPPING

Cesar Esau Medina; Mariano Alberto Casas-Valadez; Alberto Faz-Mendoza; Rodrigo Castañeda-Miranda;
Nadia Karina Gamboa-Rosales; José Ricardo López-Robles

CONFERENCE PAPERS

VIRTUAL ROOM 1J



12:00 – 14:00

BIG DATA

BIG DATA STORAGE USING MODEL DRIVEN ENGINEERING: FROM BIG DATA META-MODEL TO CLOUDERA PSM META-MODEL

Allae Erraissi; Mouad Banane; Abdessamad Belangour; Mohamed Azouazi

BIG DATA

COMPARING SEQUENTIAL AND PARALLEL WORD COUNTING METHODS IN FINDING COMMONLY USED WORDS BY DIFFERENT AUTHORS

Zahra Mohamed; Abdulla Alqaddoumi

BIG DATA

APPLYING PARALLEL PROCESSING TO IMPROVE THE PERFORMANCE OF K-NEAREST NEIGHBOR ALGORITHM

Maha Ali Alanezi; Abdulla Alqaddoumi

CLOUD COMPUTING

A SURVEY ON CLOUD-BASED DISTRIBUTED COMPUTING SYSTEM FRAMEWORKS

Ahmad Alalawi; Alauddin Yousif Al-Omary

CLOUD COMPUTING

CLOUD COMPUTING RESOURCES: SURVEY OF ADVANTAGE, DISADVANTAGES AND PRICING

Ahmad Alalawi; Alauddin Yousif Al-Omary

CLOUD COMPUTING

PERVASIVE COMPUTING PARADIGM: A SURVEY

Khadijah AbdulSattar; Alauddin Yousif Al-Omary

CONFERENCE PAPERS

VIRTUAL ROOM 2A



14:10 – 16:10

BUSINESS ANALYTICS

TREE-BASED METHODS FOR LOAN APPROVAL

Mohamed Alaradi; Sawsan Hilal

BUSINESS ANALYTICS

PREDICTION OF STOCK PRICE AND DIRECTION USING NEURAL NETWORKS: DATASETS HYBRID MODELING APPROACH

Mohamed Alaradi; Nabil Hewahi

BUSINESS ANALYTICS

FEMALE BOARD DIRECTORS AND CORPORATE FINANCIAL PERFORMANCE - A GCC EMPIRICAL EVIDENCE

Gehan Abdel-hady Mousa; Abdelmohsen Desoky; Elsayed Elamir

BUSINESS ANALYTICS

AN EMPIRICAL EXAMINATION ON THE DEGREE OF ACCOUNTING HARMONIZATION OF PPE & INVENTORY

Ali Bokhammas; Abdelmohsen Desoky

BUSINESS INTELLIGENCE

DIGITAL ORIENTATION SCALE: DEVELOPMENT AND VALIDATION

Mohammed Aliyu Dantsoho; Adamu Abubakar; Yazeed Muhammed;
Nasiru Abdullahi; Kabiru Ringim; Salisu Umar

BUSINESS INTELLIGENCE

DEVELOPMENT OF A BAHRAINI OPEN DATA WEB PORTAL FOR INVESTMENT INDUSTRY

Ehab Juma Adwan; Zainab AlHujairi; Nayla Almuqahwi

CONFERENCE PAPERS

VIRTUAL ROOM 2B



14:10 – 16:10

BUSINESS ANALYTICS

DATA ANALYTICS OF STRATEGIC AGILITY IN ORGANIZATIONAL STRUCTURE AND EXCELLENCE: A CASE OF BAHRAIN CIVIL SERVICE SECTOR

Mohamed Ahmed Almuran; Abdulsattar Alazzawi

BUSINESS ANALYTICS

MULTIPLE IMPUTATION OF MISSING DATA IN MARKETING

Anand V; Varsha Mamidi

BUSINESS ANALYTICS

SUPPORTING TOOL FOR THE TRANSITION OF EXISTING SMALL AND MEDIUM ENTERPRISES TOWARDS INDUSTRY 4.0

Miguel Baritto; Md Mashum Billal; S. M. Muntasir Nasim; Rumana Afroz Sultana;
Mohammad Arani; Ahmed Qureshi

FINANCIAL ANALYTICS

CAPITAL STRUCTURE, EQUITY OWNERSHIP AND EARNINGS MANAGEMENT

Fatima K. Rahma; Omar I. Juhmani

FINANCIAL ANALYTICS

IMPROVING STOCK PREDICTION ACCURACY USING CNN AND LSTM

Jawad Rasheed; Akhtar Jamil; Alaa Ali Hameed; Muhammed Ilyas;
Adem Özyavaş; Naim Mahmood Musleh Ajlouni

E-COMMERCE

E-BANKING PHISHING DETECTION MODELS BASED ON CLASSICAL MACHINE LEARNING ALGORITHMS

Ojo John Ajayi; Adebayo Adetunmbi; Toluwase Ayobami Olowookere

CONFERENCE PAPERS

VIRTUAL ROOM 2C



14:10 – 16:10

BIG DATA

RANDOM FOREST VS. SVM VS. KNN IN CLASSIFYING SMARTPHONE AND SMARTWATCH SENSOR DATA USING CRISP-DM

Sadiq Jaffer; Sayed Qasim Ali; Ahmed M. Zeki

BIG DATA

SKYLINE COMPUTATION ON MULTICORE ARCHITECTURES: A SURVEY

Khames Walid; Allel Hadjali; Mohand Lagha

BIG DATA

A HYBRID APPROACH FOR LINGUISTIC SUMMARIZATION OF TIME SERIES

Khedidja Boulanouar; Allel Hadjali; Mohand Lagha

BIG DATA

PARALLEL PROGRAMMING FOR CLASSIFICATION ALGORITHMS USING LOGISTIC REGRESSION AND ARTIFICIAL NEURAL NETWORKS: FRAMEWORK AND APPLICATIONS

Mohamed Almansoor; Mohamed Alaradi; Abdulla Alqaddoumi

DATA MINING

DETERMINING THE EFFECTS OF EARTHQUAKES THROUGH COMMENTS ON SOCIAL FORUMS

Ahmet Anil Mungen; Mehmet Kaya

DATA MINING

SOFTWARE DEFECTS PREDICTION USING MACHINE LEARNING ALGORITHMS

Marwa Assim; Qasem Obeidat; Mustafa Hammad

CONFERENCE PAPERS

VIRTUAL ROOM 2D



14:10 – 16:10

APPLICATIONS OF DATA SCIENCE

IMPROVE IRRIGATION TIMING DECISION FOR AGRICULTURE USING REAL TIME DATA AND MACHINE LEARNING

João Cardoso; André Glória; Pedro Sebastião

APPLICATIONS OF DATA SCIENCE

IMPACT OF DIGITAL CAPABILITIES AND TECHNOLOGY SKILLS ON EFFECTIVENESS OF GOVERNMENT IN PUBLIC SERVICES

Prabhat Mittal

APPLICATIONS OF DATA SCIENCE

SLOW HYPERTEXT TRANSFER PROTOCOL MITIGATION MODEL IN SOFTWARE DEFINED NETWORKS

Opeyemi Aderiike Abisoye; Blessing Abisoye

APPLICATIONS OF DATA SCIENCE

TIME-SERIES MODEL FOR FORECASTING SHORT-TERM FUTURE ADDITIONS OF RENEWABLE ENERGY TO WORLDWIDE CAPACITY

Qasem S Abu Al-Haija; Mashhour Al Tarayrah; Hesham Enshasy

APPLICATIONS OF DATA SCIENCE

DECISION TREE BASED CUSTOMER ANALYSIS METHOD FOR ENERGY PLANNING IN SMART CITIES

Orhan Yaman; Hasan Yetis; Mehmet Karakose

DATA ANALYTICS

EVALUATION OF NEURAL NETWORK-BASED FIRE PREDICTION MODELS FOR SMART HOME

Dolapo O Oniyelu-Banji; Olumide Adewale; Toluwase Ayobami Olowookere

CONFERENCE PAPERS

VIRTUAL ROOM 2E



14:10 – 16:10

ARTIFICIAL INTELLIGENCE FOR BUSINESS & INDUSTRIAL DATA

AN INTELLIGENT TRAFFIC MONITORING SYSTEM FOR NON- HELMET WEARING MOTORCYCLISTS DETECTION

Sumisha Samuel; Saanu Reghunadh; Ashwin K; Sandeep Sabu; Sharath Nair; Renju Varghese

ARTIFICIAL INTELLIGENCE FOR BUSINESS & INDUSTRIAL DATA

DURATION ESTIMATION OF VEHICLE BASED PRODUCTION: CASE STUDY OF ASSEMBLY LINE

Mustafa Akpinar; Kevser Ovaz Akpinar; Engin Aktas; Omer Faruk Senocak; Hatice Donmez; Varol Cavdar; Osman Selcuk Sarioglu

ARTIFICIAL INTELLIGENCE FOR BUSINESS & INDUSTRIAL DATA

ENSEMBLE LEARNING MODEL FOR PREDICTION OF NATURAL GAS SPOT PRICE BASED ON LEAST SQUARES BOOSTING ALGORITHM

Aliyuda Ali

ARTIFICIAL INTELLIGENCE FOR BUSINESS & INDUSTRIAL DATA

COMPARATIVE STUDY FOR DEEP REINFORCEMENT LEARNING WITH CNN, RNN, AND LSTM IN AUTONOMOUS NAVIGATION

Ziya Tan; Mehmet Karakose

ENERGY SYSTEMS & EFFICIENCY

ENSEMBLE LEARNING MODELS FOR SHORT-TERM ELECTRICITY DEMAND FORECASTING

Ahmed Ghareeb; Hussein Al-bayat; Qubad Haseeb; Mohammed Zeinalabideen

ENERGY SYSTEMS & EFFICIENCY

IMPACT OF NORMALIZATION ON BILSTM BASED MODELS FOR ENERGY DISAGGREGATION

Mohammed Ayub; El-Sayed M. El-Alfy

CONFERENCE PAPERS

VIRTUAL ROOM 2F



14:10 – 16:10

IMAGE ANALYSIS & TOMOGRAPHY

DETERMINATION OF SWEETNESS LEVEL OF MUNTINGIA CALABURA USING HSV COLORSPACE

Mary Anne M. Sahagun

IMAGE ANALYSIS & TOMOGRAPHY

REGION PROPOSAL AND OBJECT DETECTION USING HOG-BASED CNN FEATURE MAP

Anima Pramanik; Harshvardhan; Chawki Djeddi; Sobhan Sarkar; Jhareswar Maiti

OPTIMIZATION

MULTI-OBJECTIVE OPTIMIZATION FOR SUSTAINABLE CLOSED-LOOP SUPPLY CHAIN NETWORK UNDER DEMAND UNCERTAINTY: A GENETIC ALGORITHM

Ahmad Sobhan Abir; Ishtiaq Ahmed Bhuiyan; Mohammad Arani; Md Mashum Billal

OPTIMIZATION

REINFORCEMENT LEARNING WITH THE CLASSICAL Q-LEARNING ALGORITHM FOR OPTIMIZING SINGLE INTERSECTION PERFORMANCE

M Rosyidi; Sahid Bismantoko; Tri Widodo

PATTERN RECOGNITION

A NEW APPROACH OF STAFF LINES REMOVAL FOR MANUSCRIPT DOCUMENTS

Mekhaznia Tahar; Chawki Djeddi; Ameer BenSefia; Akhtar Jamil

PATTERN RECOGNITION

APPLICATION OF ADAPTIVE BACK-PROPAGATION NEURAL NETWORKS FOR PARKINSON'S DISEASE PREDICTION

Alaa Ali Hameed; Jawad Rasheed; Naim Mahmood Musleh Ajlouni; Akhtar Jamil; Adem Özyavaş; Zeynep Orman

CONFERENCE PAPERS

VIRTUAL ROOM 2G



14:10 – 16:10

BIOINFORMATICS & HEALTH POLICY DECISION MAKING

WARNING SYSTEM FOR THE RETURN OF COVID-19 BY USING THE SOCIAL MEDIA DATA

Shan Shan; Yulei Li

BIOINFORMATICS & HEALTH POLICY DECISION MAKING

HUMAN AGE PREDICTION BASED ON HAND IMAGE USING MULTICLASS CLASSIFICATION

Ibrahim Guelzim; Mohammed Ait Abderrahmane; Abdelkafer Ait Abdelouahad

BIOINFORMATICS & HEALTH POLICY DECISION MAKING

CHILDREN'S SOCIAL VULNERABILITY INDEX IN INDONESIA: AGAINST COVID-19

Hernanto Adwiluvito; Suryo Adi Rakhmawan

BIOINFORMATICS & HEALTH POLICY DECISION MAKING

USING MLP PARTIAL RESPONSES TO EXPLAIN IN-HOSPITAL MORTALITY IN ICU

Ivan Olier; Annabel Sansom; Paulo Lisboa; Sandra Ortega-Martorell

DATA VISUALIZATION

ENHANCE EMPLOYEE PRODUCTIVITY USING TALENT ANALYTICS AND VISUALIZATION

Raguvir S; Shekar Babu

SUPPLY CHAIN MANAGEMENT

RESILIENCE AND AGILITY AS INDISPENSABLE CONDITIONS FOR SUSTAINING VIABLE SUPPLY CHAIN DURING PANDEMICS: THE CASE OF BAHRAIN

Abdelmoneim Bahyeldin Mohamed Metwally; Salah Abdelhafeez Mostafa Ali;
Abdelansser Taha Ibrahim Mohamed

CONFERENCE PAPERS

VIRTUAL ROOM 2H



14:10 – 16:10

ARTIFICIAL INTELLIGENCE FOR BUSINESS & INDUSTRIAL DATA

AN INTELLIGENT AGRICULTURAL FIELD MONITORING AND MANAGEMENT SYSTEM USING INTERNET OF THINGS AND MACHINE LEARNING

Pramod Jacob; Sravan Suresh; Juna John; Parvathy Nath; Parvathy Nandakumar; Santhosh Simon

ARTIFICIAL INTELLIGENCE FOR BUSINESS & INDUSTRIAL DATA

IDENTIFICATION OF ASTHMA SEVERITY USING WAVELET TRANSFORM AND K-NEAREST-NEIGHBOUR CLASSIFIER

Fizza Ghulam Nabi; Kenneth Sundaraj; Rajkumar Palaniappan

ARTIFICIAL INTELLIGENCE FOR BUSINESS & INDUSTRIAL DATA

MACHINE LEARNING FOR PREDICTING PEROVSKITE SOLAR CELL OPTO-ELECTRONIC PROPERTIES

Sarhan M. Musa

ARTIFICIAL INTELLIGENCE FOR BUSINESS & INDUSTRIAL DATA

AN INTEGRATED BLOCKCHAIN APPROACH TO MODEL SECURE INTERNET OF THINGS BASED SYSTEMS

Pramod Jacob; Renju Varghese; Santhosh Simon; Kuruvilla John; Prasanna Mani; Nisha Aniyar

ARTIFICIAL INTELLIGENCE FOR BUSINESS & INDUSTRIAL DATA

QUANTUM CIRCUITS FOR BINARY CONVOLUTION

Hasan Yetis; Mehmet Karakose

ARTIFICIAL INTELLIGENCE FOR BUSINESS & INDUSTRIAL DATA

IMAGE PROCESSING BASED APPROACH FOR CRIME SCENE INVESTIGATION USING DRONE

Alper Gur; Mehmet Erim; Mehmet Karakose

CONFERENCE PAPERS

VIRTUAL ROOM 21



14:10 – 16:10

CLOUD COMPUTING

A CO-SCHEDULING SYSTEM FOR FOG-NODE RECOMMENDATION AND LOAD MANAGEMENT IN CLOUD-FOG ENVIRONMENT (COS_FRLM)

K J Naik

CLOUD COMPUTING

SURVEY: ENERGY-EFFICIENT SCHEDULING APPROACHES FOR SENSOR-CLOUD

Afrah Ali Yusuf; Alauddin Yousif Al-Omary

CLOUD COMPUTING

SECURITY AND POWER MANAGEMENT IN IOT AND FOG COMPUTING: A SURVEY

Ali Mohsin; Alauddin Yousif Al-Omary

ENERGY SYSTEMS & EFFICIENCY

AN INTELLIGENT PASSIVITY-BASED CONTROL FOR TIDAL POWER CONVERSION SYSTEM WITH PMSG

Youcef Belkhier; Abdelyazid Achour; Rabindra Nath Shaw

ENERGY SYSTEMS & EFFICIENCY

TANDEM ORGANIC SOLAR CELL OPTIMIZATION USING RESPONSE SURFACE METHODOLOGY

Ayman R. Mohammed; Irene Fahim

ENERGY SYSTEMS & EFFICIENCY

A NEW AND RELIABLE OBJECTIVE FUNCTIONS FOR EXTRACTING THE UNKNOWN PARAMETERS OF SOLAR PHOTOVOLTAIC CELL USING POLITICAL OPTIMIZER ALGORITHM

M Premkumar; R Sowmya; Pradeep Jangir; Jsv Siva Kumar

CONFERENCE PAPERS

VIRTUAL ROOM 2J



14:10 – 16:10

BIG DATA

EXPLORING THE RELATION BETWEEN BLOOD TESTS AND COVID-19 USING MACHINE LEARNING

Mohamed Almansoor; Nabil Hewahi

IMAGE ANALYSIS & TOMOGRAPHY

DIABETIC RETINOPATHY GRADING BASED ON A HYBRID DEEP LEARNING MODEL

Eman AbdelMaksoud; Sherif Barakat; Mohammed M. Elmogy

IMAGE ANALYSIS & TOMOGRAPHY

LIVER SEGMENTATION USING FAST-GENERALIZED FUZZY C-MEANS (FG-FCM) FROM CT SCANS

Yasmeen Al-Saeed; Hassan Soliman; Mohammed M. Elmogy

IMAGE ANALYSIS & TOMOGRAPHY

DETECTION OF MALAYSIAN TRAFFIC SIGNS VIA MODIFIED YOLOV3 ALGORITHM

Wan Noorshahida Mohd-Isa; Md-Shakif Abdullah; Mahmood Sarzil;
Junaidi Abdullah; Aziah Ali; Noramiza Hashim

PATTERN RECOGNITION

A NEW EMBEDDED SURVEILLANCE SYSTEM FOR REDUCING COVID-19 OUTBREAK IN ELDERLY BASED ON DEEP LEARNING AND IOT

Nashwan Othman; Ilhan Aydin; Mustafa Zuhaer Nayef

PATTERN RECOGNITION

IMPACT OF OVERSAMPLING ON THE CLASSIFICATION OF READILY BIODEGRADABLE MATERIALS

Abhilash George; Maya John

RESEARCH AND MARKETS

THE WORLD'S LARGEST MARKET RESEARCH STORE

- Big data in cognitive computing will reach \$18.6B USD globally by 2025
- Big data application infrastructure will reach \$11.7B USD globally by 2025
- Big data in public safety and homeland security will reach \$7.5B USD globally by 2025
- Real-time data will be a key value proposition for all use cases, segments, and solutions
- Market leading companies are rapidly integrated big data technologies with IoT infrastructure

