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# BOOK OF ABSTRACTS

# **IMCS-19**

2nd International Conference on Information Management, System Modeling and Computer Science August 03-04, 2019 / Amsterdam, Netherlands Organizaed by



# ACADEMIC RESEARCH AND SOLUTIONS SOCIEDAD LIMITADA

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## Book of Abstracts of the 2nd International Conference on Information Management, System Modeling and Computer Science

IMCS-19 Edited by Prof. Dr. Perez M.

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Mr. V.J. Pasola	Contact Person & Organizer
Mr. Juan García	Program Coordinator
Dr. T.I.K	Conference Secretary



#### Welcome to Academic Research and Solutions Sociedad Limitada (ARS)

ARS provides an ideal academic platform for researchers to present the latest research findings and describe emerging technologies, and directions in Social Sciences, Business Management, Engineering and Natural Science issues. The conference seeks to contribute to presenting novel research results in all aspects of Social Sciences and Engineering. The conference aims to bring together leading academic scientists, researchers and research scholars to exchange and share their experiences and research results about all aspects of Engineering, Social and Applied Sciences. It also provides the premier interdisciplinary forum for scientists, engineers, and practitioners to present their latest research results, ideas, developments, and applications in all related areas. The conference will bring together leading academic scientists, researchers and scholars in the domain of interest from around the world. Our oncoming events of the successful conference series focusing on Engineering and Social Sciences. Hence, the scientific program focuses on current advances in the research, production and use with particular focus on their role in maintaining academic level in Engineering, Social & Applied Sciences and elevating the science level. The conference's goals are to provide a scientific forum for all international prestige scholars around the world and enable the interactive exchange of state-of-the-art knowledge. The conference will focus on evidence-based benefits proven in clinical trials and scientific experiments.

Best Regards, Chairman of Conference Prof. Dr. T.I.K.



# **IMCS-19**

Venue: Mercure Hotel Amsterdam City, Netherlands

# PROGRAM SCHEDULE



#### **Conference Schedule**

#### DAY 01 Saturday (August 03, 2019)

#### Venue: Mercure Hotel Amsterdam City, Netherlands

09:00 am - 09:30 am	Welcome Reception & Registration
09:30 am - 09:40 am	Opening Ceremony
09:40 am - 09:50 am	Welcome Remarks - Dr. Perez M Conference Coordinator
09:50 am - 09:55 am	Introduction of Participants
09:55 am – 10:00 am	Group Photo Session
10:00 am - 10:30 am	Grand Networking Session and Tea Break

#### DAY 01 Saturday (August 03, 2019)

#### Session 001 (10:30 am - 12:00 pm)

#### Tracks: Social Sciences, Humanities & Applied Sciences

Point of Discussion	Presenter
Desktop Application Learning System: Multimedia Interactive Learning Online (MiLO), Teaching and Learning Tool for Hotel Front Office Management	Hafizah Rosli
Leading in the Digital Age	Prof. Anat Lechner
The Plight of Business Start-ups in Africa	Ifeonu Ikechukwu Celestine
Effectiveness of Entrepreneurship Development Support Programmes – Case of Yep Business Ideas Incubator	Ranko Markuš
Population Health Models: Integrating Social Science, Medical, and Business Infor- mation to Improve Affordable Health Outcomes	Dr. James McNally
Modbus Packet Analysis and Attack Mode for SCADA System	Dr. I-Hsien Liu

#### Lunch Break (12:00pm - 01:00pm)

#### **List of Conference Attendees**

The following scholars/ practitioners/educationists who don't have any paper presentation, however they will attend the conference as delegates & observers.

Sr. No	Official ID	Name	Affiliation Details
1	MBMSS-08- 101A	Professor PhD. Stefan Claudiu Caescu	Bucharest University of Economic Studies, Romania



# 2nd Day (August 04, 2019)

Whether visiting from overseas or interstate, delegates and guests are free to discover Netherlands and its surrounds by their own.





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**TRACK A: ENGINEERING, TECHNOLOGY & APPLIED SCIENCES** 



#### Modbus Packet Analysis and Attack Mode for SCADA System

Cheng-Hui Chou<sup>1</sup>, Chi-Che Wu<sup>2</sup>, Kuan-Chu Lu<sup>3</sup>, I-HsienLiu<sup>4</sup>, Tien-Hsiang Chang<sup>5</sup>, Jung-Shian Li<sup>6\*</sup>

**Abstract** IOT<sup>2</sup> Internet of Things) and Industry 4.0 have become more and more common in recent years. In fact, smart house that are common in the home, it also includes the monitor of the factory. Numerous IoT devices are developed on the basis of Linux. In view of this traditional network installation is more worthy of attention on the Internet of Things. We remember to update the update of the home computer but often overlook the update of the IoT device because most of the IoT devices requires manual updates. Hackers often exploit this vulnerability to attack related devices. So, how to protect the Internet of Things equipment is the topic of this study. This study proposes a honeypot search system based on self-study. The system can be used to search the honeypot system that may exist in the regional network, and design a smart honeypot system to confuse the attack of the hacker and protect the internal system of the enterprise.

Keywords: ICS, Modbus over TCP, IoT.

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# TRACK B: BUSINESS, ECONOMICS, SOCIAL SCIENCES & HUMANITIES



### Desktop Application Learning System: Multimedia Interactive Learning Online (MiLO), Teaching and Learning Tool for Hotel Front Office Management

Hafizah Rosli<sup>1\*</sup>, Pak Yuan Woo<sup>2</sup>, Aslinda Mohd Shahril<sup>3</sup>, Ezwani Azmi<sup>4</sup>, Irina Mohd Akhir<sup>5</sup>

**Abstract** The rise of learning innovation suggested that distance learning included the use of technologies such as video, audio, computer and multimedia communications into supporting extended teaching and learning tools. However, despite an increasing number of learning innovation, there has been little detailed documentation of the processes involved in this format of animation production process. More specifically, there has been little documentation and analysis of the key considerations and issues that might confront practitioners when integrating 3D animation production process with teaching and learning tool. This paper aims to examine the 3D animation production process of Desktop Application Learning System: Multimedia Interactive Learning Online (MiLO) by Kemmis & McTaggart Action Research Model. Qualitative research applied by action research methodologies and make use of reflective practice across a series of action research cycles in the form of making the 3D animation for the desktop learning application. The findings of this paper propose a new framework an animation production process for teaching and learning application by using iClone software. This paper contributes a new framework of animation production process for teaching and learning application for future researcher or designer to use it on another field that feeds the grounds.

**Keywords:** Desktop Application Learning System Multimedia Interactive Learning Online, 3D Animation, Front Office, Animation Production Process.



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#### Leading in the Digital Age

Professor Anat Lechner, PhD\*

**Abstract** Organizations across all industries are subjected to tremendous disruption from a confluence of forces including a growing global ecosystem of innovators, a shifting consumer preferences towards digital offerings, a sharp increase in venture capital and private equity funding that backsup entrepreneurs in every industry, and of course, the fast-emerging adoption of intelligent and digital technologies from artificial intelligence to mesh technologies. With the pace of industry disruption accelerating around us, it can be hard to remember that the digital revolution is still in its early days. Research by McKinsey shows that emerging digital ecosystems could account for more than \$60 trillion in revenue by 2025. The role of digital leaders will be prominent as they will need to steer, design and build systems that create an inclusive future for everyone. Disruption poses major new challenges for leaders as they seek to reset their strategies for a digital age. Research from IMD shows that leaders today find it challenging to cope with the increasing pace and unpredictability of change and effectively lead the digitization of products, processes, skills, resources and business models. This paper looks to identify the skills, competencies, and behaviors that agile leaders require to succeed in environments characterized by such accelerated disruption and how the work of leaders is different from traditional leadership practices in more stable environments.

Keywords: Digitization, Disruption, Agile-leadership.

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#### Population Health Models: Integrating Social Science, Medical, and Business Information to Improve Affordable Health Outcomes

Dr. James W. McNally\*

Abstract The provision of high-quality healthcare to all citizens is a central goal of all national governments. This task crosses multiple multidisciplinary boundaries, including medical and social sciences, economic and business models, and computer data management. A new model "Population Health" seeks to address these needs and provide researchers, policy specialists, and care providers with new tools to ensure better health outcomes for all people. Reframing Kindig and Stoddart (2003), "Population Health" is defined as the collection, organization, and aggregation of health data across multiple information platforms and technology resources. The analysis of these data into a unified, interoperable data files can lead to improvements in social, clinical, and economic decisions resulting in the improved health of an entire human population. NACDA identifies and organizes primary sources of data associated with Population health research: 1) Behavioral and Social Research Data, 2) Biomedical Data, 3) Genomic Data, and 4) Electronic Health Records (EHR), 5) Insurance and Other Costs of Care. NACDA currently manages one of nation's largest repositories of longitudinal BSR health and socioeconomic data including surveys, administrative records, geographic/contextual resources, and biodemographic information. This presentation will address the acquisition and management of data that are amenable for the measurement of population health. These data can cover a broad range of contextual, geographic, administrative, and local level resources that fit within the broad Social Determinants of Health (SDOH) model. As research continues to suggest that genetic and biological factors account for only a modest fraction of health and longevity outcomes, there is ongoing demand for geographic, community and contextual information that can be introduced into studies to control for environmental and external factors. The presentation will identify the data resources required to develop preliminary population health models and how these kinds of data resources can be developed regionally to improve health outcomes.

Keywords: Health Models, Health Outcomes.

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#### The Plight of Business Start-ups in Africa

Ifeonu Ikechukwu Celestine\*

Abstract The Main idea of business development Mostly In Africa is huge barrier, Due to funding. IN the Western world when you have a business ideal and a proposed business plan, banks and some other financial institution tends to finance major capital of the Business. To back my claim up, Some time ago I initiated a business and prepared a business plan, I took it to My friend who came back from USA. He saw it and said, this is good ideal and very lucrative business which can bring back dividence in no distance time of running the Business. but how can we fund it I can't Afford to finance all the cost, we needed some investors but if this is USA, Banks will be thrilling to finance some percent of the general start up capital he said out of disappointment, IN the nations lack of financial support to Start ups business. What I mean generally is, Many Africans have great minds and Adventures business Approaches but we lack capital finance and vehemently that leads to businesses living short life But despite all this business know-how, developing startups is a little different says Matthias Fröhlich-Rehfeld. He works for the project MakeIT in Africa which is run by the German Development Corporation (GIZ). The project supports up to 50 start-ups in Kenya and Nigeria."What is new here is the way start-ups work. How people need to be supported and brought together, so that their great ideas can be developed. CcHUB and ImpactHUB are trying to contact this gap, this kind of support doesn't just help people have ideas, but allows them to implement those ideas and be successful with them. That is what is changing now. That is what is needed now for Business Sustainability and survivor.

Keywords: Business Start-ups.

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#### Effectiveness of Entrepreneurship Development Support Programmes – Case of Yep Business Ideas Incubator

Ranko Markuš<sup>1</sup>, Mirela Omerović<sup>2\*</sup>

Abstract The business idea incubator is part of an entrepreneurial infrastructure, a program that helps potential and existing start-up entrepreneurs to start and maintain their business. Conventional investors invest in business ideas or newly established companies where there is a possibility of long-term profitability through innovation or high market demand for a product or service that business offers, but these investors avoid investing in small markets. In markets where conventional investors avoid investing in new businesses, public institutions or other market actors respond to this market inefficiency. The response of the Youth Employment Project (YEP), supported by the Government of Switzerland, was the creation of the Business ideas incubator in cooperation with the local communities in Bosnia and Herzegovina. During 2018 over 100 entrepreneurs were supported in starting or improving their business and achieved a number of long-term effects such as: employment growth, improvement of the supply on the market, reduction of public expenditures for active employment measures, increase of public revenues and improvement of the quality of life in the local community. The focus of this paper is to measure the effects of this entrepreneurship development support program through measuring public revenues generated from newly established business ventures in relation to investment by local communities in the Incubator. In order to point out the future positive effects, authors provide projections of return on invested funds in the implementation of Incubator. Paper finishes with recommendations for the improvement of future entrepreneurship development support programs for the purpose of their greater efficiency.

**Keywords:** Entrepreneurship, Entrepreneurship Development Support Programs, Return On Investment, Public Revenues.

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