PROCEEDING BOOK

Volume 1, Issue 1

BSIN-AUG-2019

Venue: **Budapest, Hungary**

Date: **August 24-25, 2019**

Institute of
Applied Sciences
& Engineering Technology

IAET International Conference on Big Data Management, System Engineering, Information Technology, Networking & Applied Sciences (BSIN)

Conference organized by:

Institute of
Applied Sciences
& Engineering Technology

This conference is dedicated to educators all over the world and to the members of the Institute of Applied Sciences and Engineering Technology (IAET) whose passion for teaching, learning, research, and service are helping to transform the academy in many positive ways.

Mission, Vision, and Core Values
Research & Innovation, Knowledge exploration and sharing, nurturing novel ideas, addressing challenges to Applied Sciences and Engineering Technology.

Lead the scholarly community through global communication and nurturing innovative ideas, developments and experiments in the field of Applied Sciences and Engineering Technology

We try to give our members a positive network/relation building experience by: 1) We have team building/socializing/gaming sessions where the members mix and talk and share with each other in an informal environment. 2) We arrange various customized events and capacity building activities for higher education institutions. 3) Dedicated and committed team to support individual and corporate members of our scholarly community.

Membership, Conference, Publishing, and Research Information
If you are interested in serving as the volunteer reviewer for the next conference, please contact:
mail: contact@institute-aet.com
Web site: http://institute-aet.com/

IAET International Conference on Big Data Management, System Engineering, Information Technology, Networking & Applied Sciences

Table of content

Welcome Message

The Institute of Applied Sciences and Engineering Technology (IAET) welcomes you to the IAET International Conference on Big Data Management, System Engineering, Information Technology, Networking & Applied Sciences

We are happy you decided to join your colleagues from around the world to explore innovative technologies, pioneering pedagogical strategies, and a sampling of international collaborations that are being used to engage and retain students, researchers and Scholars in the new millennium.

Scientific Committee

Lobna Ali Al-Khalifa,National Authority for Qualifications & Quality Assurance of Education & Training (QQA), Bahrain

Lothar Auchter, University of Applied Science, Kaiserslautern, Germany

Louise van Scheers, Department of Marketing and Retail, University of South Africa

Magorzata Magdalena Hybka, Pozna University of Economics and Business, Poland

Marvin O. Bates, Lewis University, USA

Maria Binti Abdulrahman, Universiti Utara Malaysia, Malaysiaa

Michael D. MacColl, Vancouver Island University, Canada Mukherjee

Farooq Anwar, The University of Lahore, Pakista

Dr. Nik Hazimah Nik Mat, Universiti Malaysia Terengganu, Malaysia

Dr Mourad Mansour,King Fahd University of Petroleum and Minerals Saudi Arabia

Majid Asadnabizadeh, University of Payam Noor, Bushehr Centre, Iran

Phongsakorn Methitham, Naresuan University Phitsanulok, Thailand

Maduranga Pushpika Kumara Withanawasam, University of Sri Jayewardenepura Nugegoda , Sri Lanka

Rodney Oudan, Worcester State University in Massachusetts, USA

Roger B Mason, Cape Peninsula University of Technology, South Africa

Sampath Kumar, University of Wisconsin Green Bay, USA

Salil K Sen, NIDA Business School, Bangkok, Thailand

Simon Best, Medgar Evers College, New York, USA

Yongmei Bentley,University of Bedfordshire, UK

Acknowledgements

ENGINEERING TECHNOLOGY

Acoustical Engineering Aerospace Engineering, Agricultural Engineering Biological Engineering and Sciences, Biological Systems Engineering Biomedical Engineering, Bioprocess Engineering Biotechnology, Building Services Engineering Chemical Engineering, Industrial Engineering Information Engineering, Informational Technology Manufacturing Engineering and Technology, Materials Engineering Mechanical Engineering, Mechatronics Nanotechnology and Nanoengineering, Naval Engineering Nuclear Engineering, Technology for Cloud Computing Technology for Community, Technology for Digital Age Technology for Human Use, Technology for Learning Civil Engineering, Computer Engineering Current issues and challenges in Engineering, Electrical Engineering Electronic Engineering, Energy Engineering Environmental Engineering, Food Engineering Genetic Engineering, Geotechnical Engineering Ocean Engineering and Technology, Optical Engineering Petroleum Engineering, Power Engineering Process Engineering, Resource Engineering Sensing Technology, Structural Engineering Systems and Software Engineering, Technology for Big Data Textile Engineering, Thermal Engineering Transport Engineering, Web Engineering Vehicle Engineering.

APPLIED SCIENCES

Artificial Intelligence, Architecture, Astronomy, Biological Sciences, Botany, Chemistry, Design, Earth Science, Ecology, Marine Science, Physics, Space Sciences, Life sciences, Computer Sciences, Logic, Mathematics, Statistics, Systems Science, Electrical Engineering, Information, Technology, Industrial Engineering, Mechanical Engineering, Applied Physics, Health Sciences and Medicine, Ceramic Engineering, Computing Technology, Electronics, Energy, Environmental Engineering Sciences, Engineering physics, Environmental Technology, Fisheries Science, Forestry Science, Materials Engineering Micro technology, Nanotechnology, Nuclear, Technology, Optics, Zoology Transportation

Conference Schedule

IAET International Conference on Big Data Management, System Engineering, Information Technology, Networking & Applied Sciences (BSIN)

Budapest, Hungary
August 24-25, 2019

BSIN-2019   **Saturday, August 24, 2019**

Day-at-a-Glance

09:00 am - 09:20 am	Registration and Kit Distribution
09:20 am - 09:40 am	Introduction of Participants
09:40 am - 09:50 am	Inauguration and Opening address (Mr.Akhlaq)
10:15 am 10:30 am	Tea & Grand Networking Session/ Group Photo

Session 01   10:30 am - 11:10 am

Track 01: Engineering, Technology & Applied Sciences

Website Evaluation Using Cluster Structures

Speaker: Kiyoshi Nagata — Faculty of Business Administration, Daito Bunka University 1-9-1, Takashimadaira, Itabashi-ku, Tokyo, Japan 1758571

Performance Evaluation of Web Information Retrieval Systems

Speaker: Fidel Cacheda —— CITIC - Research Center on Information and Communication Technologies. University of A Coruna, Facultad de Informatica, Campus de Elvina s/n, 15172, A Coruna, SPAIN

Session 02
11:10 am - 12:10 pm
Track 02: Business, Economics, Social Sciences and Humanities

Watch out the Dejected Face! How Face Emoticon affect Consumer Perception, with a Focus on the Three-Factor Relationship between the Sentiment Polarity, Face Emoticon and Number of Emoticon

Speaker: Chien-Huang Lin —Department of Business Administration, National Central University, Taoyuan City, Taiwan

An Empirical Study of Tourism Network Structure and Satisfaction

Speaker:James Fumihiko Isada — Faculty of Informatics, Kansai University, Takatsuki, Japan

Sentiment Analysis on Online Comments

Speaker:Jiang Liang Hou — Department of Industrial Engineering and Engineering Management, National Tsing Hua University, Hsinchu, Taiwan

Closing Ceremony & Lunch: 12:10 pm - 01: 00 pm

Conference Attendees

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

Participant Name: Yuriko Isada

Reference ID: BEGH-89-05C

Affiliaton: School of Policy, Kwansei Gakuin University, Sanda, Japan

IAET International Conference on Big Data Management, System Engineering, Information Technology, Networking & Applied Sciences

BSIN-2019   **Sunday, August 25, 2019**

Conference second day is reserved for participants own tourism activities.

Conference Abstracts

Track 1: Engineering, Technology & Applied Sciences

Website Evaluation Using Cluster Structures

Kiyoshi Nagata [*]
Faculty of Business Administration, Daito Bunka University 1-9-1, Takashimadaira, Itabashi-ku, Tokyo, Japan
Corresponding email: nagata@ic.daito.ac.jp

Since the late in 1990s when frequent commercial use of the Internet starts, research on websites has been actively conducted both by academic researcher and by website practitioners. Three broad categories of the research are Web content mining, Web structure mining, and Web usage mining. Apart from those, there are some research on coloring, placement technique of images, texts, and links on each page. In this paper, we focus on the difference between two cluster structures of website, one induced from link-based property and the other from term-based property. The link-based property is stable until a new link is added, but the term-based one varies depending on the items for searching. We propose an evaluation method for website by comparing the structures of clusters resulted from these properties. As the clustering method, here we adopt kernel k-means method, and compare partial clusters derived from term-based property depending on the given sequence of particular terms to definite partial clusters from link-based property. In order to distinguish them, we try to adopt spectral analysis.

Index Terms: Kernel K-Means Clustering, Link-Based Similarity, Term-Based Similarity, Spectral Analysis

Performance Evaluation of Web Information Retrieval Systems

Fidel Cacheda[1*], Victor Carneiro[2]

[1,2]CITIC - Research Center on Information and Communication Technologies.University of A Coruna Facultad de Informatica, Campus de Elvina s/n, 15172, A Coruna, Spain

Corresponding email: fidel.cacheda@udc.es

In this paper, we present a tool for performance evaluation of Web Information Retrieval systems, named USim. This tool is based on the simulation of users' behavior and contributes to the performance evaluation process in two ways: estimating the saturation threshold of the system and in the comparison of different search algorithms or engines. The latter point is the most interesting because, as we demonstrated, the comparison using different workload environments will achieve more accurate results (avoiding erroneous conclusions derived from ideal environments.

Index Terms: Evaluation, Retrieval Systems, Algorithms

Conference Abstracts

Track B: Business Management, Economics, Social Sciences & Humanities

Watch out the Dejected Face! How Face Emoticon affect Consumer Perception, with a Focus on the Three-Factor Relationship between the Sentiment Polarity, Face Emoticon and Number of Emoticon

Chien-Huang Lin[1*], Yidan Huang[2]
[1,2]Department of Business Administration, National Central University, Taoyuan City, Taiwan
Corresponding email: chlin@mgt.ncu.edu.tw

Consumer reviews as a form of feedback on products have grown significantly in recent years. Facial emoticons (e.g, emoji) are commonly used in the reviews on electronic commerce and online shopping sites (such as Amazon, Taobao and JD). However, there are few studies involved in the use of facial emoticons. In this paper, we examine the interactive effects of sentiment polarity and facial emoticons in user-generated reviews (UGRs) to review trustworthiness and purchase intent. We designed two experiments with experimental research methods, and studied the main effects and interactions. The result shows that facial emoticons in reviews is a key factors to affect consumer detection. Consumers perceive reliability from the reviews with facial emoticons more than from non-emoticons.Besides, only in negative reviews, slight change of emoticon in review has effect on consumer purchse intention, while the change barely affect consumer in positive and neural reviews. Moreover, we explore what result the number of emoticon and different system would lead to for interactive effect. The result demonstrate that consumers perception is relied on not only text content but also facial emoticons appeared in the text. This paper fills the gap of EWOM and CMC in the research field relevant to emoticons and consumer reviews as well as offers guidelines to practical business work.

Index Terms: Face Emoticon, Sentiment Polarity, Consumer Behavior, User Generated Reviews, Computer Mediated Communication

An Empirical Study of Tourism Network Structure and Satisfaction

Fumihiko Isada[1*], Masaru Aiki[2], Yuriko Isada[3]
[1,2]Faculty of Informatics, Kansai University, Takatsuki, Japan
[3]School of Policy, Kwansei Gakuin University, Sanda, Japan
Corresponding email: isada@kansai-u.ac.jp

The purpose of this study is to clarify the relationship between the network structure among tourist destinations and tourist satisfaction. As a methodology, we gave tourists a questionnaire concerning places visited and degree of satisfaction. Travel patterns have been classified using social network analysis. As a result of quantitative analysis, it is evident that cooperation between the central tourism resource and its surrounding facilities increases consumer satisfaction. On the other hand, even if each a sightseeing spot was linked individually, it did not increase the degree of tourist satisfaction very much.

Index Terms: Tourism Network Structure, Social Network Analysis, Degree of Satisfaction, Between Centrality, Ego Density

Sentiment Analysis on Online Comments

Jiang Liang Hou[1*], Hui Chia Yang[2], Zhao Tu[3]

[1,2]Department of Industrial Engineering and Engineering Management, National Tsing Hua University, Hsinchu, Taiwan
[3]Department of Industrial Engineering, Nankai University, Tianjin, China
Corresponding email: adamhou@ie.nthu.edu.tw

Once a company releases new products or services to the market, consumers often express their interests, feelings and overall evaluations over the Internet via online comments. Features of online comments on a specific product or service might change with time. Enterprises can capture the latest market demand trend based on the tendency explored via online comments. On the other hand, consumers can also make their own decisions based on the tendency revealed via online comments. However, various information might exist in the comments and thus companies have to spend much time in analyzing comments features. Furthermore, consumers should also devote efforts on browsing the online comments in order to acquire features about product usage, feedbacks or price evaluations from a variety of online comments. In order to assist the enterprises or consumers on analysis of online comments, this study develops a model for sentiment analysis of online comments. The proposed model can be used to visually reveal the tendency of the online comments. By applying the proposed model, enterprises can refer to the latest trend of interests, emotional tendencies and overall evaluations from consumers. Moreover, the consumers can acquire useful opinions from the public in order to make decisions on products or services that meet their needs.

Index Terms: Comment Analysis, Sentiment Analysis

Upcoming Events

http://institute-aet.com/emca-19/

http://institute-aet.com/citm-19/

http://institute-aet.com/tees-19/

http://institute-aet.com/msam-19/

http://institute-aet.com/bcat-19/

http://institute-aet.com/ciss-19/

http://institute-aet.com/icde-19/

http://institute-aet.com/sami-19/