Conference Program

29-31 July, 2019

Rome, Italy

CGMIP 2019
2019 International Symposium on Computer Graphics, Multimedia and Image Processing

CSECI 2019
2019 International Conference on Software Engineering and Computational Intelligence

ICBICC 2019
2019 International Conference on Big data, IoT, and Cloud Computing

ICSFrontiers 2019
2019 International Conference on Frontiers of Information and Communications Security

Welcome

Dear Distinguished Participants,

Welcome to 2019 International Symposium on Computer Graphics, Multimedia and Image Processing(CGMIP 2019), 2019 International Conference on Software Engineering and Computational Intelligence(CSECI 2019), 2019 International Conference on Big data, IoT, and Cloud Computing(ICBICC 2019) and 2019 International Conference on Frontiers of Information and Communications Security (ICSFrontiers 2019).

After one-year painstaking preparation, we're delighted to declare that July conference organized by IASED will be held in Rome, Italy as scheduled.

First of all, we'd like to express our sincere gratitude for your participation, which is the vital note to make the conference a great forum for the collision and fusion of ideas and knowledge. Besides, we'd like to say that the kind help and great efforts offered to our conference by our conference chair Prof. Yannis Manolopoulos is greatly appreciated. Meanwhile, we also appreciate our Keynote Speakers: Dr. Federica Sarro, Prof. Dr. Vitaliy Mezhuyev and Prof. Shujun Li who will share their newest and outstanding research achievements on the conference site.

In this big data age, the ever-changing information technology has updated and revolutionized the structure and content of our knowledge. The aim as well as the objective of CGMIP&CSECI&ICBICC &ICSFrontiers 2019 is to present the latest research and results of Computer Graphics, Multimedia and Image Processing, Software Engineering and Computational Intelligence, Big data, IoT, and Cloud Computing and Frontiers of Information and Communications Security. By providing opportunities for the delegates to exchange new ideas face-to-face, to establish business or research relations as well as to find global partners for future collaborations, we do hope that the conference will intensify mutual improvement and facilitate academic exchange, as a result that leading to significant contributions to the knowledge in these up-to-date scientific fields.

Finally, we wish 'CGMIP&CSECI&ICBICC&ICSFrontiers 2019' will be held with a complete success. At the same time, we wish you enjoy a very splendid time during the conference days in the impressive city of Rome, Italy!

Thank you!

CGMIP&CSECI&ICBICC&ICSFrontiers 2019 Committee

General Information

❖ **Registration**

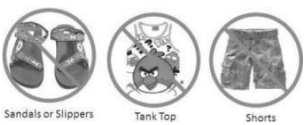
The registration desk will be situated at **Floor 1, Barceló Aran Mantegna** during the following time: **9:00-17:00, Monday 29 July, 2019.**

❖ **Remarks:** Conference will provide free coffee breaks**,** lunch and dinner on 30 July 2019, beyond the fixed menu will be on personal bill.

❖ **A Polite Request to All Participants**

Participants are requested to arrive in a timely fashion for all addresses. Presenters are reminded that the time slots should be divided fairly and equally by the number of presentations, and that they should not overrun. The session chair is asked to assume this timekeeping role and to summarize key issues in each topic.

❖**Dress Code:** Formal or national custom



❖ **Certificate**

Certificate of Attendance

A certificate of presentation indicates a presenter's name, affiliation and the paper title that is presented in the scheduled session, certifying the paper has been presented on the conference site.

Certificate of Best Paper & Best Student Paper & Best Poster

Presenters who presents a great oral presentation or poster presentation will be awarded as the Best Paper, the Best Student Paper or the Best Poster. The conference chair or the session chair will award a certificate of Best for them in the award ceremony on 30 July, 2019.

Certificate Distribution

Oral presenters will receive a certificate of presentation from the session chair at the end of your presentation.

Poster presenters will receive a certificate of presentation from the conference chair at the poster session.

Listener will receive a certificate from the conference chair at the end of the conference.

❖ **Preparation for Oral Presentations**

All presentation rooms are equipped with a screen, an LCD projector, and a laptop computer installed with Microsoft Power Point. You will be able to insert your USB flash drive into the computer and double check your file in PowerPoint. We recommend you to bring two copies of the file in case that one fails. You may also connect your own laptop to the provided projector; however please ensure you have the requisite connector.

Regular Oral Session: about 20 minutes of Presentation, 2-5 minutes of Q&A.

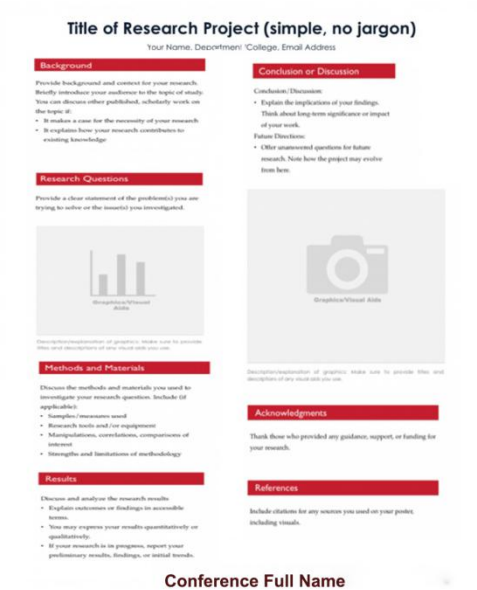
❖ **Preparation for Poster Presentation**

Materials Prepared by the Conference Organizer:

Adhesive tapes

Materials Prepared by the Presenters:

Home-made poster (s)
Material: not limited, can be posted on the canvases.
Recommended poster size: weight*height: A0 (841mm×1189mm).



Venue Information

Barceló Aran Mantegna

Address: Via Mantegna 130, Eur & Garbatella, 00147 Rome, Italy

❖ **Transportation**

Distance from the Leonardo Da Vinci AIRPORT FCO: 24 km

Distance from Ciampino G.B. Pastine AIRPORT CIA: 15 km.

from both Airport the Hotel can be reached through public taxi service from Euro 50,00 one way.

Metro B San Paolo stop: 2km, the Hotel can be reached through the bus line 766, bus stop ACCADEMIA.

AGIATI/AMBROSINI at 100 mt from the 'hotel.

Stazione Termini: 7 km, the Hotel can be reached through the bus line 714, bus stop COLOMBO/RUFINO at 100 mt from the 'hotel.

Shuttle Bus on a daily taimetable, to/from Piazza Venezia, service up to capability, it can not be reserved in advance, Euro 5,00 per person, one way.

Venue

Item	Room
Registration	Floor 1, Barceló Aran Mantegna
Welcome	3A Room, Floor -2, Barceló Aran Mantegna
Keynote Session	3A Room, Floor -2, Barceló Aran Mantegna
Oral Presentation	3A Room, Floor -2, Barceló Aran Mantegna
Coffee Break	Prefunction, 3A Room
Poster Presentation	Prefunction, 3A Room
Award Ceremony & Closing Ceremony	3A Room, Floor -2, Barceló Aran Mantegna
Lunch	Parnaso Restaurant， Floor -1,Barceló Aran Mantegna
Dinner	Parnaso Restaurant， Floor -1,Barceló Aran Mantegna

Program Overview

	Monday 29-July	**Tuesday** 30-July	**Wednesday** 31-July
09:00-09:15	Registration	Welcome Address	Free Day
09:15-10:00		Keynote Speech 1 **Prof.Yannis Manolopoulos**	
10:00-10:30		*Coffee Break & Group Photo*	
10:30-11:15		Keynote Speech 2 **Prof. Shujun Li**	
11:15-12:00		Keynote Speech 3 **Dr. Federica Sarro**	
12:00-13:00		Lunch	
13:00-13:45		Keynote Speech 4 **Prof. Dr. Vitaliy Mezhuyev**	
13:45-14:05		Oral Presentation	
14:05-14:25			
14:25-14:45			
14:45-15:05			
15:05-15:45		Coffee break&Poster presentation	
15:45-16:05		Oral Presentation	
16:05-16:25			
16:25-16:45			
16:45-17:05			
17:05-17:25			
17:25-17:45			
17:45-18:15		Award & Closing Ceremony	
18:15-19:15		Dinner Banquet	

Keynote Session

Keynote Speech 1

09:15-10:00, Tuesday, 30th July, 2019

3A Room, Floor -2, Barceló Aran Mantegna

Title: Status and opportunities in scientific impact forecasting

Prof. Yannis Manolopoulos

Faculty of Pure & Applied Sciences, Open University of Cyprus, Cyprus

Abstract

Significant efforts have been made to quantify scientific impact and identify the mechanisms that influence its evolution. The first step is the identification of what constitutes scholarly impact and how it is measured. In this direction, published approaches focus on future citation count prediction, on fitting the distribution of citation accumulation, on modelling the decay of attention received by papers, on accurately identifying award winners, hot research topics or academic rising stars. A plethora of features have been contemplated as possible influential factors such as preferential attachment, communicative memory and cultural memory. Assorted machine and neural learning methodologies have been adopted to ensure timely and accurate estimations. Here, we provide an overview of the field challenges, as well as a taxonomy of the existing approaches to identify the open issues.

Introduction to Prof. Yannis Manolopoulos

Yannis Manolopoulos is Professor of the Open University of Cyprus and serves as its first Vice-rector. He has been with the Aristotle University of Thessaloniki (AUTH), the University of Toronto, the University of Maryland at College Park and the University of Cyprus. He has served as Rector of the University of Western Macedonia in Greece, Head of the Department of Informatics of AUTH, and Vice-Chair of the Greek Computer Society. His research interests focus in Data Management. He has co-authored 5 monographs published by Springer, 11 textbooks in Greek, as well as 350 journal and conference papers. He has also received 5 best paper awards from SIGMOD, ECML/PKDD, MEDES (2) and ISSPIT conferences. He has received 12.000 citations from 1900 distinct academic institutions (h-index=52) and has been invited as keynote speaker in 15 international events. He has served as main co-organizer of several major conferences (among others): ADBIS 2002, SSTD 2003, SSDBM 2004, ICEIS 2006, EANN 2007, ICANN 2010, AIAI 2012, WISE 2013, CAISE 2014, MEDI 2015, ICCCI 2016, DAMDID 2016, CBI 2017, TPDL 2017, DASFAA 2018, WIMS 2018. He has also acted as evaluator for funding agencies in Austria, Canada, Cyprus, Czech Republic, Estonia, EU, Hong-Kong, Georgia, Greece, Israel, Italy, Poland and Russia. Currently, he is member of the Editorial Boards of (among others): Information Systems (Elsevier), The VLDB Journal (Springer), The World Wide Web Journal (Springer), The Computer Journal (Oxford Academic).

Coffee Break & Group Photo

Tuesday, 30th July, 2019	10:00-10:30	3A Room, Floor -2

Keynote Session

Keynote Speech 2

10:30-11:15, Tuesday, 30th July, 2019
3A Room, Floor -2, Barceló Aran Mantegna

Title: Socio-technical Aspects of Privacy and Data Protection

Prof. Shujun Li

School of Computing, University of Kent, UK

Abstract

In this talk, the speaker will focus on socio-technical aspects of privacy and data protection. He will start from the origin and definitions of privacy as a concept more in social sciences, and then move on to discuss some complicated socio-technical challenges facing researchers and practitioners when designing and developing user privacy and data protection solutions. He will introduce some of his recent work in this area including an ongoing project on privacy protection for leisure travellers. He will conclude his talk with his ongoing research on the new challenges arising from the widely acknowledged tension between legal requirements of privacy / data protection (e.g., by EU GDPR) and applications based on distributed ledger technologies (e.g., blockchain), for which a number of ongoing pieces of research are ongoing at the Kent Interdisciplinary Research Centre in Cyber Security (KirCCS), University of Kent.

Introduction to Prof. Shujun Li

Shujun Li is a Professor of Cyber Security at the School of Computing, University of Kent, UK, since November 2017. He is also Director of Kent Interdisciplinary Research Centre in Cyber Security (KirCCS), a UK government recognised Academic Centre of Excellence in Cyber Security Research (ACE-CSR). His research interests are mostly around interdisciplinary topics covering cyber security, human factors, digital forensics and cybercrime, and multimedia computing. Due to the interdisciplinary nature of his research, He is actively working with researchers from other disciplines such as Electronic Engineering, Psychology, Sociology, Law, and Business. He is

currently leading two large research projects on human-centric approaches to cyber security, one focusing on privacy protection of leisure travellers. He has published over 100 peer-reviewed research papers at international journals and conferences including two Best Paper Awards. According to Google Scholar, he has an h-index of 41, with over 6000 citations. In 2012 he received an ISO/IEC Certificate of Appreciation, for being the lead editor of ISO/IEC 23001-4:2011 "Information technology – MPEG systems technologies – Part 4: Codec configuration representation", the 2nd edition of the MPEG RVC (Reconfigurable Video Coding) standard. He is currently on the editorial boards of 5 international journals, and has been on the organising or technical program committees of over 100 international conferences and workshops. He is a Fellow of BCS, a Senior Member of IEEE, and a Member of ACM. More about his research and professional activities can be found at his personal website http://www.hooklee.com/.

Keynote Speech 3

11:15-12:00, Tuesday, 30th July, 2019

3A Room, Floor -2, Barceló Aran Mantegna

Title:Living and Working in a Data-driven World: Predictive Analytics for Software Engineering

Dr. Federica Sarro

University College London, UK

Abstract

Software has nowadays pervaded all aspects of our lives. This allows the production and collection of a large amount of information about people's behaviours and decisions. Predictive analytics exploits such information through intelligent systems able to identify patterns and predict future outcomes and trends. Applied to Software Engineering, it helps us better understand software processes, products and customers in order to maximise product quality, users' satisfaction, and revenues. In this talk I will present some of the automated approaches based on data mining, artificial intelligence, machine and statistical learning, I have devised to support software engineers in their activities.

Introduction to Dr. Federica Sarro

Federica Sarro is an Associate Professor at University College London in the Department of Computer Science.

Her research covers Predictive Analytics for Software Engineering (SE), Empirical SE and Search-Based SE, with a focus on software effort estimation, sizing, testing, and mobile app store analysis.

Dr Sarro has published more than 60 papers in prestigious software engineering conferences and journals and also received several international awards, including three best paper awards and the GECCO-HUMIES awarded for the human-competitive results achieved by her work on multi-objective effort estimation.

She is an active member of the Software Engineering community: Over the last four years she has organised and chaired more than 15 international events and served on more than 50 program

committees, receiving in 2018 the ACM distinguished reviewer award at ICSE'18. In 2018 she has been elected as Chair of the Steering Committee of the International Symposium on Search-Based Software Engineering (SSBSE), after having served it as a member for 3 years.

Dr Sarro has also been Associate Editor of several SE journals, including the Empirical Software Engineering (EMSE) journal, and Guest Editor for the journals IEEE Transactions on Evolutionary Computation (TEVC) and Elsevier Information and Software Technology (IST).

Lunch

Tuesday, 30th July, 2019	**12:00-13:00**	**Parnaso Restaurant, Floor -1**

Keynote Session

Keynote Speech 4

13:00-13:45, Tuesday, 30th July, 2019

3A Room, Floor -2, Barceló Aran Mantegna

Title:Living and Working in a Data-driven World: Predictive Analytics for Software Engineering

Prof. Dr. Vitaliy Mezhuyev

University Malaysia Pahang, Malaysia

Abstract

The methodology of Domain Specific Mathematical Modelling (DSMM), which implementation aims to overcome the shortcomings of existing methodology of Domain-Specific Modelling is proposed. DSMM introduces an additional level of the metamodelling architecture, which allows users to take into account a mathematical structure of modelled domains, and to apply mathematical operations for the development of new effective methods for solving domain-specific problems. The concepts of the metamodel, metamodelling, levels of the metamodelling architecture and the formal semantics of the DSMM metamodels are defined. Examples of DSMM application for the

development of metamodels and their use for the domains modelling are discussed.

Introduction to Prof. Dr. Vitaliy Mezhuyev

Vitaliy Mezhuyev received a degree in informatics from Berdyansk State Pedagogical University (BSPU), Ukraine, in 1997. In 2002, he received a PhD in Educational Technology from Kiev National Pedagogical University and, in 2012, an ScD in Information Technology from Odessa National Technical University, Ukraine. From 2004 until 2014, he was a Head of the Department of Informatics and Software Engineering at BSPU, Ukraine. Now he is Professor at Faculty of Computer Systems and Software Engineering in University Malaysia Pahang, Head of the Software Engineering Research Group. During his career, Vitaliy Mezhuyev participated in the multiple international scientific and industrial projects, devoted to the formal modelling, design, and development of advanced software systems as a network-centric real-time operating system; IDEs for the automation of development of parallel real-time applications; tools for specification, verification and validation of software products; visual environment for metamaterials modelling and others. His current research interests include formal methods, metamodeling, safety modelling and verification of hybrid software systems, and the design of cyber-physical systems.

Oral Presentation

Tuesday, 30th July, 2019	**13:45-15:05**	**3A Room, Floor -2**

Conference Chair: Prof. Yannis Manolopoulos

CI003
Dr.Sulaiman N. Aljarallah
Loughborough University, United Kingdom
20 min

Towards an Understanding of the Difference between Software Quality Characteristics and Software Sustainability Characteristics
Sulaiman Aljarallah | Russell Lock

Software sustainability has generated much interest in the software engineering field in recent times, and has been widely investigated across different fields and from different standpoints. The relationship between software quality and software sustainability is still an open question. In this study, a literature survey and comparison was conducted using three-phases, having as a starting point the comparison of basic models for software quality. A follow-up study, conducted at a more comprehensive level to cover both basic models and the most cited tailored models. , Software sustainability literature is investigated to find the most frequent characteristics. Finally, data gathered from these studies and a comparison shows a similarity in the top level of these characteristics between software sustainability and software quality, and the emphasis on sustainability, maintainability and portability. The study suggests that ISO 25010 can be utilised by software sustainability. As a future work, the findings will be investigated empirically to support designing software sustainability framework identifying the most important criteria in the

technical dimension.

CI1003
Asst. Prof. Asma HACHEMI
Computer Systems Laboratory, Computer Science Department
USTHB
Algiers, Algeria
20 min

Software Process Patterns Reuse
Asma HACHEMI | Mohamed AHMED NACER

Software process patterns offer proved solutions and enable their reuse in different situations of software development process modeling. This reuse can take two main forms: the creation and the modification of software development process models (SDPM). We give through this paper a literature revue on process patterns reuse, to show the advantages of important works in this field, but also the difficulties yet to be addressed.

CI004
Ahmed Kamal Al-khazaali
Computer Engineering Techniques, Al-esra University,
Baghdad, Iraq
20 min

All-encompassing review of biometric information protection in fingerprints based steganography
Ahmed Kamal Mohsin | Mohammed Mahdi Hashim | Mohd Shafry Mohd Rahim

In ascertaining the authenticity of a person's identity, the techniques that utilises Biometric Technology and its vital aspects and attributes are essential in endorsing this endeavour. Transversing the years, identification through biometric means has heightened much attention with regards to its susceptibility to assaults whilst information are being transferred. Thus, there is a dire need for the development for a safeguarding means. Steganography and watermarking methods are adopted towards the enhancement of biometric information secureness. Watermarking entails the embedding of data within file that carries the data, in safeguarding intellectual property rights and copyrights that involves music, video or image files. Meanwhile, steganography entails the concealment of data. This research puts forward an all-encompassing review pertaining the latest steganography methods that has been implemented to protect the biometric fingerprints information up-to-date. This review categorises the fingerprint system into various sections, inclusive of methods for extracting features and matching procedure.

IP005

Singing evaluation based on deep metric learning
Terry Tan

This paper aims to evaluate singing performance based on deep metric learning. The vocal will be represented by Mel spectrogram as an input of our proposed model. The process to build up our model splits into pretraining and training steps. The output of the model is a Euclidean distance reflecting

Terry Tan University of Science and Technology of China **20Min**	singers' performance. Experimental results show a stable and reliable singing evaluation.

Coffee Break & Poster Session

Tuesday, 30th July, 2019	**15:05-15:45**	**Prefunction, 3A Room**

Poster

Oral Presentation

Tuesday, 30th July, 2019	**15:45-17:45**	**3A Room, Floor -2**

Conference Chair: Prof. Yannis Manolopoulos

IP1001
Yanyan Xu
Wuhan University，China
20 min

A Secure CBIR Method based on Bag-of-Visual-Words Model under Cloud Environment

Yanyan Xu | Xiao Zhao | Jiaying Gong

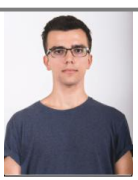
With the rapid development of cloud computing technology, more and more users choose to outsource image data to clouds. To protect users' privacy and guarantee data ' s confidentiality, images need to be encrypted before it is outsourced to CSP, but this brings new difficulties to some important data services, such as content based image retrieval (CBIR). A secure CBIR method based on BoVW (Bag of Visual Words) model under cloud environment is proposed in the paper. Images are expressed as frequency histogram by BoVW model, orthogonal decomposition is utilized to divide it into two individual parts of component coefficients thus encryption operation and feature extraction operation can be executed separately, and orthogonal composition is used to fuse the encrypted operation results to construct secure image index. After encrypted image index and encrypted images are outsourced to CSP, distance comparison can be executed by CSP on feature extraction field without violating data privacy. Encrypted images with the closest distance

to query trapdoor are returned to users to decrypt and obtain plain images. Any encryption algorithms can be used to encrypt images and search index by using orthogonal transformation, so that the proposed method is practicable. Retrieval precision is improved and better performance are achieved by using BoVW model. The security analysis and experimental results show our scheme has obvious advantages in security and retrieval performance.

CC1003
Dr.Young-Kyu Kim
Korea electronics technology technology institute (KETI), Korea
20 min

Data-Centric Accelerator Design Based on Processing in Memory
Young-Kyu Kim | Doung-Sun Kim | Young-Jong Jang

The data-centric computing paradigm has recently garnered a great deal of attention from the research community as a method for overcoming the performance limits of traditional computing systems, including the memory wall crisis. One promising approach to mitigating this issue in future computer systems is processing in memory (PIM). PIM facilitates the stacking of processing logic and memory dies in a single package and minimizes data movement by placing the computation close to where the data reside. As this approach, however, requires compatibility with existing computer architectures and operating systems, it has not been widely adopted. To meet the need for compatibility, this paper proposes a hardware architecture of PIM and verifies the functions of the proposed architecture by an embedded system based on the PIM platform, which employs a commercialized application processor (AP) and a standard memory protocol. We also propose a PIM-based data-centric accelerator for image processing. Experiments involve the development of AP- and PIM-based application programs for processing a median filter that uses a 24-bit color image with a 512 × 512 resolution test image. Using the same test image, we measure the median filter processing times and compare the processing times of the AP and the proposed PIM. Results of the experiments show that the processing time of PIM is about 84% faster than that of the AP.



CC1004
Gellért István Hegyi
Department of Telecommunications and Media Informatics

Measurements based performance evaluation of Function-as-a-Service Platforms
Gellért István Hegyi | Markosz Maliosz | Csaba Simon

This paper evaluates the current state of the Function as a Service(FaaS) landscape and investigates the extent of the applicability of this new technology for the use-cases of today. We have selected the most popular Function as a Service platforms and have measured the relevant application performance parameters(latency and database access rate) under different types of load. Our source code used by our experiments are available from our public repository. Our measurements confirm that the investigated FaaS technologies have stable performance characteristics under various load conditions. They can be safely applied to a large number of use-cases and their performance will hold up to the

Budapest University of Technology and Economics Budapest, Hungary **20 min**	traditional solutions with also added benefits as well, such as less operational costs and better scalability.

CC008
Moe Unno
Shizuoka Institute of Science and Technology, Japan
20 min

Issues and effects of information infrastructure operation for SIST
Moe Unno | Yusuke Suzuki | Shinya Mizuno

In recent years, information infrastructure becomes an essential environment in education as information technology advances. The information infrastructure of educational institutions is not just infrastructure but is also significantly related to education and research. However, it is difficult for small and medium-sized universities to make a considerable investment. So, it is essential to construct an efficient information infrastructure and to manage an effective operation system with a few staff. Our university implemented to reconstruct information infrastructure in 2018, as "Completion of the information technology of Shizuoka Institute of Technology Educational Group". The first purpose of this plan is the development of the information infrastructure in the university. The second purpose is that all schools in our group, such as junior high school, high school, and professional college, will use this environment in the future to realize cross-functional work linkage. Also, we conducted a questionnaire at each school in order to get the needs and issues. This result will lead to future direction. In this research, we evaluated our information infrastructure improvement implemented in 2018 and clear issues or problems. We also analyze the ICT environment questionnaire for each school and propose a plan for information infrastructure development in the next schedule. Also, we built a system that tried to use information infrastructure data in order to link IR.

Poster Session

Tuesday, 30th July, 2019	15:05-15:25	Prefunction, 3A Room
5-minute oral presentation with demo on stage		
Session Chair: Prof. Yannis Manolopoulos		
SF1001	**Prof. Armin Kržalić** Faculty of Criminalistics, Criminology and Security Studies University of Sarajevo Sarajevo, Bosnia and Herzegovina *Securitization and Criminalization of Migrants in Bosnia and Herzegovina*	
IP006	**qian zhang** | shunye wang | hongguang hao Institute of Forensic Science, Ministry of Public Security, China *Research on Automatic Recognition of Homologous Plastic Seals*	
CC006	**Hyorim Lee** Kyungpook National University, South Korea *Use of Text Mining and Text Network Analysis to Identify Korean Educational Research Trends: A literature review*	

Poster Session

Tuesday, 30th July, 2019	15:25-15:45	Prefunction, 3A Room

SF1001
Prof. Armin Kržalić
Faculty of Criminalistics, Criminology and Security Studies University of Sarajevo Sarajevo, Bosnia and Herzegovina

Securitization and Criminalization of Migrants in Bosnia and Herzegovina

Armin Kržalić | Nedžad Korajlić

The paper explores the nature and trend of migration during 2018, on the example of Bosnia and Herzegovina. The politicization of migrants' issues as well as a number of other factors contributed to the attitude of criminalization and securitization of migrants. Most authors and researchers dealing with the issue of migrants as well as the security representatives themselves argue that migrants are not a security threat to Bosnia and Herzegovina and that the state should treat them humanely and treat them according to international standards. In this paper we have determined that it is necessary to work on building additional capacities to accommodate migrants who have not found any accommodation or are on routes of Bosnia and Herzegovina, and that is important to undertake activities on technical, material and financial support for migration management in Bosnia and Herzegovina. We have used a qualitative research approach with the use of interview techniques and desk

analysis for the purpose of collecting and processing primary and secondary data.

IP006
qian zhang
PPSUC
Institute of Forensic Science, Ministry of Public Security,China

Research on Automatic Recognition of Homologous Plastic Seals
qian zhang | shunye wang | hongguang hao

To realize the automatic identification of homologous plastic stamp, four classic convolutional neural network models were run by using the pytorch framework and three plastic stamps with the same chapter content were engraved using three laser scanning speeds to seal with uniform moderate pressure. 15 300 complete imprints were scanned to obtain a printed image as sample data. The effects of training sample size and network model on the automatic recognition of homologous seals were studied. The results show that the convolutional neural network can realize the automatic identification of homologous plastic stamp and the increase of the training sample size can increase the performance of the model. The highest test accuracy can reach 100%, in enough training sample conditions, Resnet50 model is the best choice

Listener

Tuesday, 30th July, 2019 **3A Room, Floor -2**

CI01

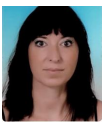
Asst. Prof.Dr.Nojood Aljehane

Suadi Arabia

CC01

WangDan

Chongqing University of Posts and Telecommunications, China



CC02

Martha Plexida

Deputy Executive Director of Digital Transformation EYDAP SA -Greek

Award Ceremony & Closing Ceremony

Tuesday, 30th July, 2019	**17:35-18:05**	**3A Room, Floor -2**

Dinner Banquet

Tuesday, 30th July, 2019	**18:05-19:05**	**Parnaso Restaurant， Floor 1**

Free day

Wednesday, 31st July, 2019

Hope you'll enjoy your journey!

www.icobn.net

www.iarce.org

www.icstte.org

www.ccvpr.org

www.icfmce.org

www.iccsse.org

Note

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