



7<sup>TH</sup>

# WORLD CONFERENCE ON COMPUTER ENGINEERING

C O M E N G - 2 0 2 1

28-30 MAY 2021 | UNIVERSITY OF KYRENIA | KYRENIA, CYPRUS

# PROGRAM BOOK

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## COMENG-2021 Participant Flags



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**7TH GLOBAL CONFERENCE ON COMPUTER  
ENGINEERING  
ONLINE INTERNATIONAL CONFERENCE**

**University of Kyrenia  
Kyrenia, Cyprus  
28 - 30 May 2021**

**PROGRAM  
BOOK**

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Academic World Education and Research Center  
Association for Human, Science, Natura, Education and Technology

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## KEYNOTES



**Dr. Arthur Bakker**

Utrecht University, Utrecht, Netherlands Editor-in-Chief:  
Educational Studies in Mathematics (Index in SSCI and  
Scopus) <http://orcid.org/0000-0002-9604-3448>

**Keynote Title:** “Future themes of mathematics education research: an international survey before and during the pandemic”

**Abstract:** Before the pandemic (2019), we asked: *On what themes should research in mathematics education focus in the coming decade?* The 229 responses from 44 countries led to eight themes plus considerations about mathematics education research itself. The themes can be summarized as teaching approaches, goals, relations to practices outside mathematics education, teacher professional development, technology, affect, equity, and assessment. During the pandemic (November 2020), we asked respondents: *Has the pandemic changed your view on the themes of mathematics education research for the coming decade? If so, how?* Many of the 108 respondents saw the importance of their original themes reinforced (45), specified their initial responses (43), and/or added themes (35) (these categories were not mutually exclusive). Overall, they seemed to agree that the pandemic functions as a magnifying glass on issues that were already known, and several respondents pointed to the need to think ahead on how to organize education when it does not need to be online anymore. We end with a list of research challenges that are informed by the themes and respondents’ reflections on mathematics education research.



**Prof. Dr. Hüseyin Uzunboylu**

Higher Education Planning, Supervision, Accreditation and Coordination Board, Nicosia, North CYPRUS  
Editor-in-Chief, Cypriot Journal of Educational Sciences (ERIC& SCOPUS)  
President, Cyprus Educational Sciences Association (Members of EERA& WERA)  
[huseyin.uzunboylu@gmail.com](mailto:huseyin.uzunboylu@gmail.com)

**Keynote Title:** will be announced...

**Bio:** Hüseyin Uzunboylu graduated from Anadolu University, completing a degree in BSc Educational Communicating and Planning in 1991. He graduated from Ankara University; completed a degree in MA Curriculum and Instruction in 1995 and completed PhD in area of Educational Technology in 2002. He became Assistant Professor in 2013, Associate Professor in 2015 and Professor of Educational Technology in 2010 at Cyprus Near East University. He was elected to member of “Higher Education Planning, Supervision, Accreditation and Coordination Board” by the Republican of Parliament in November in 2019.



**Deepak Mane**

Senior Data Scientistcompany – tata consultancy servicesOrcid: <https://orcid.org/0000-0003-4369-6514>

**Keynote Title:** “ “Certain Investigations On Financial Crime Analysis Using Machine Learning Approaches”

**Abstract:** Financial crimes are the most significant threat happening globally which affects the regular life activities of the public in the considerable manner. The Police investigation departments detect serial crime based on their similarity and the locations. The manual analysis for finding the crime location details with the less man power of police departments would be very difficult and time consuming process. Crime analysis mapping is the process of utilizing the geographical information system processing the crime analysis techniques together in order to focus on the spatial context of the crimes in the specified regions. The class imbalance problem and low clustering accuracy for effective serial crime detection. Serial crime detection can be done by collecting the crime data from police record of Coimbatore city in INDIA, and then analyzing the types of crimes that had occurred serially in a specified manner in a particular location. The detection can be made more effective by oversampling the imbalanced dataset and then clustering the crime data according to specified features. Thus a modified cut clustering (MCC) method is integrated with Majority Weighted Class Oversampling (MWMO) approach integrated with it to form Majority Weighted Class Oversampling and Modified Cut Clustering (MWMO-MCC) method. Social crime data which is in unstructured format must be pre-processed to handle it in an efficient manner. Social crime data aware kernel density estimation based serial crime detection approach (SAKDESD) is introduced to group the similar crimes. Hotspot mitigation is done by improving the interpolation method and including more graph measures for higher accuracy in hot spots mitigation. The interpolation method is improved by incorporation of the triangulation approach to form Triangulation based interpolation method (TIM). The Performance of the serial crime was evaluation

# PROGRAM BOOK

## IMPORTANT EVENTS

29.05.2021 10:00 – 10:15	Opening Ceremony	
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TIME	TITLE	SPEAKER	HALL NAME
29.05.2021 10:15 – 11:00 Keynote 1	"Future themes of mathematics education research: an international survey before and during the pandemic"	Dr. Arthur Bakker Utrecht University, Utrecht, Netherlands Editor-in-Chief: Educational Studies in Mathematics (Index in SSCI and Scopus) <a href="http://orcid.org/0000-0002-9604-3448">http://orcid.org/0000-0002-9604-3448</a>	1

11:00 – 11:20	Coffee Break	
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TIME	TITLE	SPEAKER	HALL NAME
29.05.2021 11:20 – 12:00 Keynote 2	"Certain Investigations On Financial Crime Analysis Using Machine Learning Approaches"	Deepak Mane Senior Data Scientistcompany – tata consultancy services <a href="https://orcid.org/0000-0003-4369-6514">https://orcid.org/0000-0003-4369-6514</a>	1

12:00 – 13:00	Lunch	
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TIME	TITLE	SPEAKER	HALL NAME
29.05.2021 13:00 – 13:45 Keynote 3	"Will be announced..."	Prof. Dr. Hüseyin Uzunboylu Higher Education Planning, Supervision, Accreditation and Coordination Board, Nicosia, North CYPRUS Editor-in-Chief, Cypriot Journal of Educational Sciences (ERIC& SCOPUS) President, Cyprus Educational Sciences Association (Members of EERA& WERA)	1

13:45 – 14:00	Coffee Break	
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29.05.2021 18:00 – 18:30	Closing Ceremony	
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29/05/2021, Saturday

IMPORTANT EVENTS

29.05.2021 10:00 – 10:15	Opening Ceremony	
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TIME	TITLE	SPEAKER	HALL NAME
29.05.2021 10:15 – 11:00 Keynote 1	"Future themes of mathematics education research: an international survey before and during the pandemic"	Dr. Arthur Bakker Utrecht University, Utrecht, Netherlands Editor-in-Chief: Educational Studies in Mathematics (Index in SSCI and Scopus) <a href="http://orcid.org/0000-0002-9604-3448">http://orcid.org/0000-0002-9604-3448</a>	1

11:00 – 11:20	Coffee Break	
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TIME	TITLE	SPEAKER	HALL NAME
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12:00 – 13:00	Lunch	
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TIME	TITLE	SPEAKER	HALL NAME
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13:45 – 14:00	Coffee Break	
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**Session 1**  
**14:00 – 16:00**

ORDER	TITLE	AUTHOR, AFFILIATION and COUNTRY
1	The Use of Dynamic Geometry Software in Secondary School Mathematics Lessons and a General Framework	Hafize Gamze Kirmızıgöl, Turkey
2	Students reasoning about concepts of topology: the case of locally finite family of closed sets	Khalid Bouhjar, <i>American University of Malta</i> , Malta
3	Gifted Students' Mathematical Modelling Experiences with the Weather Problem	Firdevs İclal Karatas Aydın, <i>Giresun University</i> , Turkey
4	Solving Inequalities Over the Field of Complex Numbers	Aslanbek Naziev, <i>Ryazan State University</i> , Russian Federation
5	Determination of science and biology teachers' ethical sensitivities towards the use of experimental animals	Büşra Ceyhan, <i>Istanbul Health and Technology University</i> , Turkey
6	Experimental Evaluation Of Compressive Strength Of Concrete With Several Local Sand Exposed To Freeze-Thaw Cycles	Mohamed Lyes Kamel KHOUADJIA, <i>University of Brother Mentouri Constantine 1</i> , Algeria



16:00 – 16:20	Coffee Break
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**Session 2**  
**16:20 – 18:00**

ORDER	TITLE	AUTHOR, AFFILIATION and COUNTRY
1	Development of Magnesium Aluminate (MgAl <sub>2</sub> O <sub>4</sub> ) Nanoparticles for Thermal Applications	Shaheer Ahmed Khan, <i>International Islamic University Malaysia</i> , Malaysia
2	Solution of second order nonlinear boundary value problems using artificial intelligence	Gilder Cieza Cieza, Peru
3	A new strategy for Curriculum Learning using Model Distillation	Kaan Karaköse, Metin Bilgin, <i>Bursa Uludağ University</i> , Turkey
4	Smart learning technology for computer programming driven by research related to COVID-19	Ramona Markoska, University St. Kliment Ohridski, Bitola, Macedonia

29.05.2021 18:00 – 18:30	Closing Ceremony
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