





Logic and Computer Science: An Inseparable Bond

An on-line workshop with the UNESCO World Logic Day

Organized and hosted by the Faculty of Informatics and Computer Science

On Monday January 16, 2023 at the British University in Egypt

Workshop Co-Chairs: Professor Omar H. Karam and Dr. Mohammed Almisbkawy

Monday, January 16, 2023, 10:00 a.m. – Meeting Room, Building H, BUE

- 10:00 a.m.: Welcome (Professor Omar H. Karam)
- 10:10 a.m.: "Logic and Artificial Neural Networks" (Professor Andreas Pester)
- 10:40 a.m.: "From Logic to Logics; The Journey of Man and Machine Relationship: Can we build a non-western machine?" (Dr. Mohammed Almisbkawy)
- 11:10 a.m.: "The Logic of Building Nests" (Ms. Toka Hassan)
- 11:30 a.m.: BREAK
- 12:00 p.m.: Fuzzy Rule-based Systems (Professor Khaled Nagaty)
- 12:30 p.m.: "Knowledge from Chaos", (Ms. Nadine Farag)
- 12:50 p.m. 1:00 p.m.: "The World Logic Day: When, How and Why?"

An Address from Professor Jean-Yves Beziau, Founder, World Logic Day

1:00 p.m. – 1:10 p.m.: Closing Remarks (Prof. Omar H. Karam, Dr. Mohammed Almisbkawy)

To attend online, the link is provided below. You are also welcome to attend in person. LINK: Click to go to meeting







Omar H. Karam obtained his B.Sc. in Electrical Engineering (Communications and Electro-physics) from Alexandria University, Egypt, and his M.Sc. and Ph.D. in Computer Engineering from North Carolina State University, USA. Professor Karam is currently the Dean of the Faculty of Informatics and Computer Science at The British University in Egypt (BUE). He is also a Professor of Information Systems at Ain Shams University in Cairo. His research interests are Knowledge Discovery Algorithms and Parallel Systems Design. He is an elected member of the Electrical and Computer Engineering Honor Society "IEEE_HKN".

Andreas Pester Professor Andreas Pester is a Mathematician and a Data Scientist. He is a Professor with the Faculty of Informatics and Computer Science at the British University in Egypt. He has more than 25 years experience in teaching math and mathematical modeling, simulation technologies, remote engineering, online labs, machine learning (in German, Russian and English). He was previously responsible for the development of Data Science and Machine Learning research and teaching at the Engineering & IT

department of the Carinthia University of Applied Sciences (Austria). In addition to his extensive scientific publications, Professor Pester was involved in more than 15 EU and national projects (as project leader or as collaborator). He is also a reviewer for PhD promotions at UPC Barcelona, UNED Madrid and a member of PhD committee at University of Reading, UK, Institute for Systems Engineering. He was a Guest Professor in the UPC Barcelona, Technical University of Kharkov and Kiev, University Maribor, UNESP Bauru (Brazil), University of Applied Sciences Vienna, Armenian-American University in Yerevan, PUC Rio de Janeiro, and University Banja Luka.

Mohammed Almisbkawi is an associate professor of logic, philosophy of science and metaphysics at the British University in Egypt and Fayoum University. He received his Bachelor of Arts from Ain shams University, Faculty of Arts, 1993 and his MA on logic and philosophy of science at Cairo University, 2002. His thesis was titled "The Law of Non-Contradiction and the Law of Excluded Middle between Two-Valued Logic and Many-Valued Logic". He obtained his PhD from Cairo University in 2006 and the thesis was titled "The Concept of Completeness in Axiomatic Systems". In addition, Dr. Almisbkawy was a guest editor for a

special issue of the American Journal of Sociological Research entitled "Religion in Postmodernism age ". He published several books and papers on logic, philosophy in science and metaphysics. Currently he is working on a project called "The metaphysics of exclusion".













Khaled Nagaty received his B.Sc. in Statistics (1982) and his Ph.D. in Digital Image Processing from Cairo University (1999). He was an Associate Professor of Computer Science with the Faculty of Computer and Information Sciences at Ain Shams University in Cairo. He is currently a Professor with the Faculty of Informatics and Computer Science at the British University in Egypt in partnership with London South Bank University, UK since 2008. His current research interests include machine vision, pattern recognition, distributed systems, wireless network sensors, cryptography, tomography, biometrics, machine learning and optimization.

Toka Hassan is a Teaching Assistant at the Faculty of Informatics and Computer Science of The British University in Egypt where she also graduated majoring in Computer Science. Currently, she is pursuing an MSc degree focusing on Natural Language Processing and short story understanding and analysis. Her research interests include serious games, game development, cybersecurity, and natural language processing and understanding.

Nadine Farag believes that everything happens for a reason, and that life is a tale of causes & effects which can be mathematically interpreted. She is a Teaching Assisstant at the British University in Egypt teaching Introduction to Philosophy for Computer Science majors and other modules. Ms. Farag is now studying for her Master's degree. Her research in Chaos Theory is inspired by automated and computational techniques for analyzing complex systems. She has a strong interest in analyzing complex systems behavior through Chaos & Order, because nothing is ever random!

Jean-Yves Beziau (JYB) is the creator of the World Logic Day,

the World Logic Prizes Contest, the founder and Editor-in-Chief of the book series Logic PhDs and the logic area editor of the Internet Encyclopedia of Philosophy. He is a Swiss Logician, Philosopher and Mathematician, PhD in mathematics and PhD in Philosophy. He is currently Professor at the University of Brazil in Rio de Janeiro, and former President of the Brazilian Academy of Philosophy. JYB is the originator of Universal Logic as a general theory of logical structures,

and the founder and Editor-in-Chief of the journal *Logica Universalis* and book series *Studies in Universal Logic*, both published by Birkhäuser/Springer, Basel.







