



Global Scientific Guild Conference

Abstract Book

9th Global Webinar on Applied Science, Engineering and Technology

March 06-07, 2024

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San Jose State University,
USA

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Prof. Dr. Eduard Babulak
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Upcoming Events-2024

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| 11th Global Webinar on Traditional and Integrative Medicine | <i>March 13-14, 2024</i> |
| 10th Global Webinar on Forensic Science | <i>March 20-21, 2024</i> |
| 2nd Global Webinar on Neuroscience and Brain Disorders | <i>March 27-28, 2024</i> |
| 9th Global Webinar on Materials Science and Engineering | <i>April 03-04, 2024</i> |
| 5th Global Webinar on Laser, Optics and Photonics | <i>April 17-18, 2024</i> |
| 9th Global Webinar on Public Health | <i>April 24-25, 2024</i> |
| 7th Global Webinar on 3D Printing and Additive Manufacturing | <i>April 29-30, 2024</i> |
| Global Webinar on Pharmaceuticals and Drug Delivery Research | <i>June 05-06, 2024</i> |

Upcoming Events- 2024

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| Global Webinar on Renewable and Sustainable Energy | <i>June 12-13, 2024</i> |
| Global Webinar on Vaccines Research and Development | <i>June 19-20, 2024</i> |
| 4th Edition of Global Webinar on Nanotechnology and Nanoscience | <i>June 26-27, 2024</i> |
| 10th Global Webinar on Applied Science, Engineering and Technology | <i>July 03-04, 2024</i> |

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Dr. M.E. Fayad

San Jose State University, USA

Knowledge Map Unified Domain Analysis (KM-UDA)

Galileo Galilei said, “All truths are easy to understand once they are discovered; the point is to discover them.” Our systematic, unified, and stable Knowledge Map (KM) discovers all the truths about any domain. The existing domain analysis techniques and domain experts are very good at identifying the tangible aspects of any discipline that considers the applications aspect of the analyzed field. Our Knowledge Map-Unified Domain Analysis (KM-UDA) forms the basis, core, and strong and unified foundation to understand any domain problem and its solution patterns. KM-UDA can create reusable and stable pattern languages and their analysis, design, and architectural patterns. Knowledge Maps’ (KMs) main idea is to allow practitioners and developers to master the discipline of interest through accurate domain analysis using KMs via stable patterns and an insightful methodological process. It gives practitioners and developers the necessary means and tools for a complete retrospective of the stable patterns pertinent to a discipline of particular interest and the tidbits of advice on how to use them to satisfy specific needs. This keynote delineates a new creative process and provides an understanding of the knowledge map for domain analysis based on the fundamental concepts of unification and stability.

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Biography:

Prof. Dr. M.E. Fayad is Full Professor at SJSU and a Founder and CEO at AITG, Aeesh Press, and i-SOLE. Previously, he was J.D. Edwards's professor of Software Engineering in the Department of Computer Science & Engineering at the University of Nebraska, Lincoln, from 1999 to 2002. Dr. Fayad is a well-known and recognized authority in theory and the applications of Software Engineering, Linguistic Engineering, and the Art of Abstraction. Fayad's publications are in the very core archival journals and conferences in the field of software engineering. Dr. Fayad was a guest editor on 11 theme issues. Dr. Fayad has published more than 300 high-quality articles, which include profound and well-cited reports (more than 50 in number) in reputed journals, over 100 advanced articles in refereed conferences, more than 25 well-received and cited journal columns, 16 blogged columns, 11 well-cited theme issues in prestigious journals and flagship magazines, 24 different workshops in very respected conferences, over 125 tutorials, seminars, and short presentations in more than 25 States in the USA since 1978 and 52 other countries. Dr. Fayad is also filling for eight new, valuable, and innovative patents and has developed over 800 stable software patterns and brought a breakthrough in software engineering. Dr. Fayad earned an MS and a Ph.D. in computer science and engineering from the University of Minnesota at Minneapolis. His research topic was OO Software Engineering: Problems and Perspectives. He is the lead author of several classic Wiley books, CRC, and Aeesh Press, Inc

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Mr. Richard Georg Graf

*University of Digital Technologies in Medicine and
Dentistry in Luxembourg*

Demand-driven events with decision making management

It has been proven that people's skills are not sufficiently utilized when working together in a team; instead, ideas are mutually devalued and destroyed. Instead of providing a solution, conventional communication and project methods have only exacerbated this problem.

Highly trained people have caused 75% of software projects to fail partially and completely since 1994 (Chaos Report 2022). The people responsible in management and leadership positions in companies and society are aware of the causes of 72% of inefficient meetings and events (McKinsey, HBR 2019). In Germany, €720 billion and €19 trillion are lost worldwide as a result (Bain & Company 2019).

The weaknesses in decision-making and communication are known as cognitive biases. Dominant speakers dominate and the more silent ones do not get their ideas heard. The priming effect and biases have been scientifically investigated, but they work unconsciously and prevent constructive decision-making and communication. Nudges as a countermeasure are too costly and insufficient to achieve the desired goals.

With previous decision-making and communication methods, innovations are only implemented slowly and with little success. Advancing into disruptive areas of innovation with completely new ways of thinking and decision-making has not yet been possible, or only to a limited extent.

Jointly supported decisions are team decisions that are jointly supported by a team and initiate a jointly supported implementation. Team decisions could revolutionize previous concepts for individual decisions and general communication with teams and peo-

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ple, from ideation to successful implementation.

The authoritarian and participative decisions according to governance and power relations remain intact so that this leap innovation can lead to a gentle disruption.

Digitized Decision-Making Management (dDMM) is intended to show how to navigate through the topic of Demand-Driven Events..

Biography:

He strives for giving people a chance to do well. His affinity for the Applied Science and Engineering Technologies stems from his early exposure to information technology. In 1975, he already programmed on one of the first available computers, the Zuse Z23. Starting in 1979, he was involved in the marketing of search engines and the development of neural networks. In 1991, Richard Georg Graf founded his first IT company for large analytical systems, such as the employment statistics of the Federal Employment Agency. His experiences are based on 200 projects that he led as a project and multi-project manager, as well as 80 change and transformation projects in companies. Since 1993, and exclusively from 2010 onwards, he has been researching the human decision-making process for high performance teams. He discovered the neurobiological inseparability and the neural interaction of body, emotions, intuition, and cognition (KiE) and developed Decision-Making Management for jointly supported team-decisions, published by Hanser Verlag in 2018: “Die neue Entscheidungskultur” (The New Decision Culture). Richard Georg Graf taught at Goethe University Frankfurt for Business Administration: Strategic Management, at Europa University Frankfurt (Oder) Viadrina for Cultural Studies: Language Usage and Therapeutic Communication, and at Friedrich-Alexander University Erlangen-Nuremberg for Engineering Sciences: The New Decision Strategy in the Digital Age. However, his roots lie in the family craft business, and his passion is for conscious individuals who decide and act in a self-organized and self-responsible manner.

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Dr. Glenn Tony Manuel Barrera

Barrera Science Lab, Sweden

Optimal Algorithms

Optimal Algorithms.

There are among many , mainly two types of algorithms we are going to consider here
1) Mathematical geometric drawing algorithms s.t. Lines , circles , ellipses, hyperbolas, gaussians, exponentials and many more. 2) Mathematical function calculation algorithms s.t. Multiplication, division squareroots, nth roots, logarithms, exponentials , sines , cosines ,... e.t.c . The main types of drawing algorithms are; Incremental algorithms such that the Bresenham algorithm, our improved circle algorithm can be calculated with only additions and subtractions making it optimal in the binary digital system, Diffenence equation evaluation algorithms, and functional plot algorithms, to mention the second category here we have a very very fast parametric ellipse algorithm invented by the author 30 – 40 years ago, it is driven by two second order linear trigonometric difference equations , requiring only two multiplications in the inner-loop. There are many ways to calculate Mathematical functions , One of the most known and used methods are Taylor series expansion, but more rare is the super and hyperfactorization methods we will present they accelerate the series to immense fast convergence, making these algorithms optimal too.

Biography:

Tony Barrera is a certified autodidact math genius. He have published more than 42 Ordinary high rated scientific papers And up to several hundred publications, computer simulations and animations In different subjects, scientific papers in mathematics , computer graphics, numerical analysis, astrophysics and Particle Atomic physics. Tony does research general together with prof Ewert Bengtsson, Prof Anders Hast and Physicist Bo Thelin and the crew of Barrera Science Lab.

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Dr. Tomasz Krystofiak

Poznan University of Life Sciences, Poland

Surface activation methods in the furniture industry

The furniture industry is introducing various materials with better aesthetic and decorative effects. These are good from the customers' point of view. Nevertheless, furniture manufacturers sometimes have problems with adhesion in bonding and finishing technologies. There are different groups of methods for activating furniture materials, among the commonly used are physical-mechanical, chemical, and electrical. Surface treatment with plasma, corona discharge, or air, as well as the use of adhesion promoters (primers) and sanding, are methods that can be used to improve the gluability or paintability of various materials. Such methods can be used in various technologies, including edgebanding, profile-wrapping, wood and wood-based composites finishing. Adhesion promoters can be used based on organic compounds from the solventborne and waterborne products catalyzed by isocyanates. Research results of employees and students from recent years were presented.

Biography:

Tomasz Krystofiak in 1994 was finished study of Faculty of Wood Technology at Agriculture Academy in Poznan. In 2002 he prepared a PhD dissertation and in 2019 habilitation. Author or co-author of more than 320 scientific publications in the scope of gluing and finishing of wood and wood-based composites. To his research activities belongs surface phenomena, wettability, adhesion and adherence, modification, gluability and paintability of lignocellulosic materials. He was a Management Committee Member of COST Actions FP1006, CA15216, CA 21159 and Working Group Member (FP1303, FP1407). Since 2021 Guest Editor in Special Issues in Coatings, Energies, Forests and Materials Journals.

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Dr. Chris McGinty

Skywise Cloud, USA

Bridging Quantum Mechanics and Hydrogen Technology: The MEQ Framework

The quest for sustainable and clean energy sources has never been more critical than it is today. Among the various renewable energy options, hydrogen holds immense promise as a clean and versatile fuel. However, harnessing hydrogen as an energy source requires overcoming several challenges, one of which is the efficient and cost-effective production of hydrogen through water splitting. This study delves into the fusion of theoretical physics and practical engineering in the development of advanced hydrogen-splitting technologies, shedding light on how the groundbreaking McGinty Equation (MEQ) framework plays a pivotal role in this endeavor.

Hydrogen production through water splitting is a process that holds significant potential for generating clean energy. However, traditional methods of water electrolysis often involve high energy inputs, limiting their efficiency and economic viability. This is where the integration of theoretical physics, as exemplified by the MEQ, becomes crucial. By incorporating principles from quantum field theory and fractal potentials, the MEQ provides a novel approach to understanding and optimizing the water-splitting process at the atomic and molecular levels. This multidimensional framework enables researchers to explore innovative pathways for enhancing the efficiency of hydrogen production, ultimately contributing to the advancement of sustainable energy solutions. In this guide, we explore how the fusion of theoretical physics and practical engineering is driving progress in the development of advanced hydrogen-splitting technologies, offering a glimpse into a cleaner and more sustainable energy future..

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Biography:

Chris McGinty is a visionary entrepreneur who has revolutionized theoretical physics and artificial intelligence. With an unquenchable thirst for understanding the universe, Chris embarked on a quest to develop a unified framework that could transform our knowledge of nature. Through extensive research, he introduced the MEQ, an extraordinary unified equation bridging quantum physics and field theory. As the founder of the L_TOE (Lagrangian Theory of Everything) framework, Chris assembled a brilliant team and harnessed cutting-edge AI technologies to explore the intricacies of the MEQ. This endeavor birthed Skywise.ai, an innovative platform uniting quantum-inspired algorithms, computational resources, and simulation tools to advance various domains. Chris's unwavering pursuit of knowledge and commitment to pushing scientific boundaries have cemented his status as a pioneering figure. His work lays the groundwork for quantum computing, artificial intelligence, and our comprehension of the universe's fundamental laws. Through interdisciplinary collaboration, Chris inspires future generations, leaving an enduring impact on scientific progress.

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Dr Xiaowen Kang

Harvard University

USA

The Mathematical Principles of Philosophy—Mathematical Explanation of the Roll Principle as the Common Foundation of Natural and Social Sciences

This presentation ventures into the exploration of the “Roll Principle,” a pivotal notion that serves as a bridge between the disciplines of natural and social sciences through the lens of mathematical philosophy. We delve into how this principle establishes a common foundation, enriching our comprehension of the intricate interconnectedness that permeates these fields. Utilizing mathematical methodologies, we unveil the Roll Principle’s potential to amalgamate diverse scientific domains, thereby revealing new perspectives on their fundamental congruence. This exposition not only sheds light on the theoretical synergy between natural and social sciences but also underscores the tangible benefits for cross-disciplinary research and practical applications.

Biography:

Xiaowen Kang completed his PhD in Engineering Physics from Tsinghua University. With a decade of experience in engineering, energy, economics, and social data analysis, he later became a Visiting Fellow at Harvard University. Kang has published over 40 articles and authored a book, showcasing his contributions across multiple disciplines. He is recognized for his interdisciplinary approach, blending physical sciences with analytical expertise to address complex challenges. Xiaowen Kang completed his PhD in Engineering Physics from Tsinghua University. With a decade of experience in engineering, energy, economics, and social data analysis, he later became a Visiting Fellow at Harvard University. Dr.Kang has published over 40 articles and authored a book, showcasing his contributions across multiple disciplines. He is recognized for his interdisciplinary approach, blending physical sciences with analytical expertise to address complex challenges.

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Mrs. Dipanwita Burman

*Account Manager (India & Middle East), Naukrigulf.com
Co-founder, Learn Maths with Dipayan
India*

Connecting Computing Power to Human Insights - A Strategic Framework for Artificial Intelligence in Marketing

Connecting Computing Power to Human Insights – A Strategic Framework for Artificial Intelligence in Marketing The digital transformation led by disruptive technologies can help organizations address numerous challenges and deliver better customer value through innovative technologies in all business areas. Artificial intelligence (AI) is finding its application in various business disciplines and is expected to be one of the most important technological tools used in marketing in the years to come.

AI aids in proliferating information and data sources, improving software’s data management capabilities, and designing intricate and advanced algorithms. AI is changing the way brands and users interact with one another. Marketers can now focus more on the customer and meet their needs in real time. By using AI, they can quickly determine what content to target and which channel to employ at what moment. Users feel at ease and are more inclined to buy what is offered when AI is used to personalise their experiences. AI tools can also be used to analyse the performance of a competitor’s campaigns and reveal their customers’ expectations.

In this paper, the author has reviewed the role of Artificial Intelligence in marketing (AIM). The paper provides comprehensive detail of the benefits of implementing AI in marketing, how AI is reshaping marketing and the need of AI in marketing which is illustrated with real world examples from different businesses. This paper also entails a section dedicated to implementation of different AIM strategies. The author has thoroughly studied the implications of AIM technology throughout the customer life cycle. Lastly, there is a detailed sector-wise and region-wise analysis..

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Biography:

Dipanwita Burman has completed her MBA in Marketing from Institute of Technology & Management, Mumbai and Master's in Applied Economics from Christ University, Bangalore. She is a Marketing & Analytics Professional with a cross-functional experience of 8+ years in diverse industries - Internet; Media; Apparel & Fashion; FMCD; Financial Services; Automobile & Education. She has also completed Executive Education Programmes from IIM Bangalore in "Business Analytics - The Science of Data Driven Decision Making" and from IIM Ahmedabad in "Customer Relationship Management".

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Mrs Nia Luckey

Infosys Consulting

USA

Cybersecurity Management: Reshaping GRC Compliance

Cybersecurity management and policy play pivotal roles in safeguarding the integrity of organizational assets against evolving cyber threats. However, amidst this criticality, there remains a lack of consensus regarding the characterization of cybersecurity as an applied science. This discussion explores the fundamental aspects of cybersecurity management and policy as an applied science, aiming to elucidate its definitions, scopes, and methodological underpinnings. This discourse will scrutinize the parallels and distinctions between cybersecurity and established applied sciences, including engineering, medicine, and management by exploring historical precedents and conceptual frameworks. Moreover, it will dissect the challenges and prospects inherent in applying scientific methodologies and principles to cybersecurity conundrums and delineate the ethical and societal responsibilities incumbent upon cybersecurity practitioners and researchers. The synthesis of these deliberations will culminate in the proposition of a comprehensive framework tailored to define and propel cybersecurity management and policy as a robust and efficacious applied science. Consequently, this discussion offers profound insights into how the consolidation of cybersecurity within the applied sciences realm can reshape the Governance, Risk, and Compliance (GRC) adherence landscape for organizations and entities in an increasingly digitized world.

Biography:

Nia Luckey is a cybersecurity expert and innovator who works as a cloud services engineer at a leading global consulting firm. She has over 15 years of experience in the IT industry, specializing in mergers and acquisitions, cloud program management, and cybersecurity governance, risk, and compliance. She is also a passionate advocate for diversity and inclusion in cybersecurity, and she has established two nonprofit chapters in North Carolina to support and mentor aspiring professionals in the field. She is a frequent speaker and contributor at various industry events and publications, sharing her insights and best practices on how to succeed in the ever-changing cyber landscape. When she is not working or volunteering, she enjoys traveling, reading, and spending time with her family.

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Prof. Dr. Eduard Babulak

*National Science Foundation
USA*

The Ultra-Smart Cyberspace driven by the AI & Humanoid Robotics

Given the current dynamic developments in the field of Mechanical Engineering, Mechatronics, Humanoid Robotics, AI, Nano & Bio Technologies, Semiconductors, Very Large Scale Integration, New Materials, and Smart Medicine, with the ubiquitous access to high-speed Internet 24/7, the Ultra-smart Cyberspace is becoming reality. The Smart Computational Systems are collecting, processing and analyzing a real-time medical data utilizing the Electronic Health Record (EHR) to fast treatment, prevention and healing of the wave of new viruses and diseases and ultimately safe human lives. The areas of research in the field of Mechanical Engineering, Mechatronics, Nano-Bio Technologies, Microelectronics, Computing and AI & Humanoid Robotics create a new platform for future e-Health utilizing new biomechanical humanoid devices. In light of currently ongoing developments of Covid-19 crisis, having effective real-time application of Ultra-smart Cyberspace, with applied AI & Robotics and Big Data will support critical live saving surgeries in Next generation tele-Medicine. Due to Covid-19, the humanity lives in the most dramatic times, yet despite of its most negative impact it does also inspire dynamic innovation, research and developments in the world of health, business, government, industry, plus., while promoting seamless creation of multidisciplinary teams of experts in the nation and worldwide. The author discuss the Ultra-Smart Cyberspace driven by the AI Humanoid Robotics in the Third Millennium with current and future dynamic trends in research, innovation and developments of Mechanical Engineering, Mechatronics, AI in Cyber Security, Computational Mechatronics, Smart Health, and cutting-edge Humanoid Robotics that would provide support to save lives and to make best real-time decisions worldwide. Together we may find the answer to a question: Will the AI be well understood and become part of our daily live or else? .

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Biography:

Professor Dr. Eduard Babulak is accomplished international scholar, researcher, consultant, educator, professional engineer and polyglot, with more than thirty years of experience. He served as successfully published and his research was cited by scholars all over the world. He serves as Chair of the IEEE Vancouver Ethics, Professional and Conference Committee. He was Invited Speaker at the Oxford and University of Cambridge, MIT, Purdue University, Yokohama National University and University of Electro Communications in Tokyo, Japan, Shanghai Jiao Tong University, Sungkyunkwan University in Korea, Penn State in USA, Czech Technical University in Prague, University at West Indies, Graz University of Technology, Austria, and other prestigious academic institutions worldwide. His academic and engineering work was recognized internationally by the Engineering Council in UK, the European Federation of Engineers and credited by the Ontario Society of Professional Engineers and APEG in British Columbia in Canada. He was awarded higher postdoctoral degree DOCENT – Doctor of Science (D.Sc.) in the Czech Republic, Ph.D., M.Sc., and High National Certificate (HNC) diplomas in the United Kingdom, as well as, the M.Sc., and B.Sc. diplomas in Electrical Engineering Slovakia. He serves as the Editor-in-Chief, Associate Editor-in-Chief, Co-Editor, and Guest-Editor. He speaks 16 languages and his biography was cited in the Cambridge Blue Book, Cambridge Index of Biographies, Stanford Who's Who, and number of issues of Who's Who in the World and America.

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Prof J.C. Umavathi

Gulbarga University

India

Application and usage of recent software's to solve Fluid Mechanical problems using numerical methods

Many problems from Engineering, Optimization, Economics, Physics and other disciplines can be brought in the form of equations or variational inequalities using mathematical modeling. The field of computational sciences gives a lot of opportunity to solve these problems and has seen a considerable development in Mathematics. Therefore any physical problem is reduced to differential equations either Linear or non-Linear and ODE or PDE depending on the physical model. These reduced ODE's and PDE's are solved either analytical or numerical methods. Hence an overview of possible numerical methods such as finite difference, finite element and spectral methods are discussed. Bioinspired engineering flows, internal flows, population, bioconvection fuel cells are some of the areas discussed. Further modeling and CFD simulations of MAGLEV bullet trains is also presented using Ansys Fluent software. CFD simulations of multifluid flows using house coding is discussed with examples occurring in fluid mechanics.

Biography:

Prof. J.C. Umavathi completed her Post Doctoral from the Department of Engineering, University of Sannio, Piazza Roma 21, 82100 Benevento, Italy. She is working as Professor in the Department of mathematics, Gulbarga University since 1993. She has published more than 215 research articles in reputed international journals. She is a recipient of Kalpana Chawla Young Scientist award, Sir J.C. Bose award and Erasmus Mundus Fellowship.

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Dr Orestis Denis Valianatos

*Dr Orestis D. Valianatos, Global President and CEO,
ATMOS Global Pty Ltd, Australia*

ATMOS-GlobATMOS-Global-Leadership^{AI}: a revolutionary breakthrough in mastering exponential artificial intelligence for unprecedented growth in productivity, profitability and innovational-Leadership^{AI}: mastering exponential artificial intelligence for sustainable business resilience

The role of leadership is undergoing a revolutionary transformation in the new era of artificial intelligence (“the new space race”) in which strategic foresight and technological prowess are paramount. The ATMOS-Global-Leadership^{AI} groundbreaking program is a game changer, a versatile and transformative toolkit that empowers progressive leaders with cutting-edge capabilities, skills and insights to capitalise on opportunities arising from exponential AI advancements (retrieval-augmented generation, autonomous intelligent agents and multi-modal interactions). The program represents a commitment to continuous innovation, adaptability and data-centric security, unlocking new possibilities and building an authentic bridge between humanity and AI that embraces change, fosters sustainable adaptability and resilience, anticipates the future and sets new benchmarks for impactful innovation and strong growth to achieve excellence in today’s AI-enabled global marketplace.

Sam Altman, CEO of OpenAI, said “Technology and society need to co-evolve in a case like this, so technology is going to change with each iteration but so is the way society works and that’s got to be this interactive iterative process and we need to embrace it but have caution without fear.” (Bloomberg, Davos January 2024).

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Biography:

Dr Orestis D. Valianatos is the Global President and CEO of ATMOS Global Pty Ltd (ATMOS Global TM), a highly accredited and accomplished professional company director, an astute investor in the capital markets, an established innovator, a role model, a visionary thinker with a diverse portfolio of formal qualifications (BSc, MSc, PhD in Atmospheric Physics, Climate & Sustainability, Master of Business Administration, Professional Doctorate in International Business and Sustainability, Corporate Governance training as a Professional Board Director, and soon a Diploma of Finance), experience, unique insight and influential global perspective across multiple domains including artificial intelligence, leadership, strategy and innovation, sustainability, ESG, climate-tech, thematic and sustainable investing. Entrepreneur and agent of change, he has authored more than 50 ground-breaking international research papers as a subject matter expert working in partnership with senior personnel from government departments, universities and major private clients from the mining, manufacturing and energy & utilities sectors.

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Prof. Hoshang Kolivand

*Liverpool John Moores University
United Kingdom*

How Machine Learning is Reshaping Mixed Reality

In this talk, we delve into the profound impact of ML on Mixed Reality, uncovering the latest advancements and groundbreaking innovations that are reshaping our digital experiences. From sophisticated real-time simulations to personalized virtual environments, explore how AI's integration with Mixed Reality is driving unprecedented immersion and transforming the way we perceive and interact with the virtual world. Join us as we unravel the limitless possibilities and implications of this transformative fusion.

Biography:

Hoshang Kolivand is an Assoc. Prof in AI and Mixed Reality at Liverpool John Moores University (LJMU). With an MS degree in Applied Mathematics and Computer Science and a PhD and a Postdoc in Augmented Reality, he is a leading expert in these fields. As the Head of the Applied Computing Research Group at LJMU, Dr. Kolivand leads a team of over 35 researchers, focusing on AI and Augmented Reality. He has published extensively with over 170 papers in international journals and has presented at numerous conferences. Dr. Kolivand is a Senior Member of the IEEE and has served as a keynote speaker at more than 55 international conferences. He has organized over 30 conferences in AR, VR, AI, and HCI. In addition to his academic contributions, Dr. Kolivand has authored book chapters and several products which received over 14 awards for his work in Virtual Reality and Augmented Reality. As a dedicated researcher and educator, Dr. Hoshang Kolivand plays a significant role in advancing AI and Mixed Reality technologies, making valuable contributions to the field through his expertise and leadership.

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Prof. Dr. Sailesh Iyer

Dean at Rai University

India

Technological Advancements and UN Sustainable Development Goals

United Nations has declared 17 Sustainable Development Goals (SDG) for building an sustainable ecosystem globally. This includes Good Health and Well-being, Quality Education, Sustainable Cities and Communities, Climate Action, Affordable and Clean Energy, Clean Water and Sanitation etc. where Technological Advancements and Innovation can play a vital role in achieving these goals. This Keynote Speech would focus on various use cases and how technology can transform the entire global situation by providing viable solutions to pertinent problems faced by mankind. Similarly, technologies can be harnessed for smart transportation, healthcare, smart farming solutions, and robotics-based implementation in real-time scenarios challenges.

Biography:

Prof. Dr. Sailesh Iyer has a Ph.D. (In computer Science) and currently serving as a Professor and Dean with Rai University, Ahmedabad. He has more than 22 years of experience in Academics, Industry, and Corporate Training out of which 18 years are in core Academics. He has Patents to his credit and is involved as an Editor for various book projects with IGI Global (USA), Taylor and Francis (UK) and Bentham Science (UAE). A hardcore Academician and Administrator, he has excelled in Corporate Training, Delivered Expert Talk in various AICTE sponsored STTPs, ATAL FDPs, Reputed Universities, Government organized Workshops, Orientation, and Refresher Courses organized by HRDC, Gujarat University. Research Contributions include reputed Publications, Track Chair at ICDLAIR 2020 (Springer Italy), icSoftComp 2020, IEMIS 2020 (Springer), ICRITO 2020 (IEEE), ARISE-2021, FTSE-2021, and TPC members of various reputed International and National Conferences, Reviewer of International Journals like Multimedia Tools and Applications (Springer), Journal of Computer Science (Scopus Indexed), International Journal of Big Data Analytics in Healthcare (IGI Global), Journal of Renewable Energy and Environment, and Editor in various Journals. Expert Talk on Research-based topics in various Universities and Conferences in addition to guiding Research Scholars as supervisors. He has also been invited as a Judge for various events, Examiner for Reputed Universities, is a Computer Society of India Lifetime Member and also serving as Managing Committee (MC) Member, CSI Ahmedabad Chapter from 2018-2020.

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Mr Balam Singh Fartiyal

Godrej Infotech Ltd., India

Envisioning a Wire-Free Future: Sustainable Development in Renewable Energy and Environmental Safety

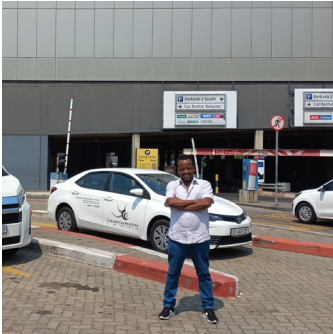
As the global demand for sustainable and efficient energy sources intensifies, the pursuit of innovatory approaches in the fields of renewable energy, environmental safety, and water resource development becomes crucial. This presentation at the Global Webinar on Applied Science, Engineering, and Technology delves into the paradigmshifting research aimed at reducing the environmental footprint by revolutionizing how we transmit power and communicate. The core of this research lies in the quest to eliminate physical wires, not merely as conductive pathways but as environmental and aesthetic pollutants. We will explore the latest developments in wireless technologies, addressing both their potential and their challenges. By scrutinizing the comprehensive impact of these technologies on environmental conservation, we discuss novel strategies in managing natural water resources sustainably, thus ensuring the strengthening of ecosystems and the protection of biodiversity. The interrelation between the reduction of wire usage and the increase in environmental and social well-being will be a spotlight, including how wire-free initiatives could lead to significant economic benefits by reducing material costs and maintenance, and by lessening the visual and physical impact on landscapes. In addition to unveiling the environmental and economic implications, the research's social impact will be evaluated. This includes potential enhancements in the quality of life, health benefits, and contributions to the well-being of societies globally. The session aims to inspire stakeholders, innovators, and policymakers to embrace the wire-free movement, underlining its significance as a cornerstone of technological progress and environmental responsibility in our collective push towards a sustainable future.

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Biography:

Balam Fartiyal melds his economics acumen with a PG diploma in computer applications to innovate in software development, focusing on renewable energy and environmental safety. His work ambitiously targets the elimination of wires in communication and power, striving for sustainable resource management. Passionate about gauging his projects' ecological and societal impacts, Balam's pioneering initiatives aim to improve global well-being and propel economic and environmental synergies for a wire-free, greener future.

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Mr. Agegnehu Tesfaye
Haramya University, Ethiopia

Smoothing Mixed Integer Nonlinear Chance Constrained Optimization And Its Application

Numerous engineering fields can use the Mixed Integer Nonlinear Chance Constrained Programming Problem (CCMINLP). Yet, due to the structural nature of CCMINLP, it is extremely challenging for existing solvers to handle this kind of problem. The main challenge is caused by MINLP's NP nature and the conventional method's evaluation of the probabilistic restriction. Consequently, in our work, we present new approximate techniques, namely modified inner and outer approximation approach. By using a continuously differentiable function, we approximate the probabilistic constraint. Next, the optimization problem is approximated by a series of nonlinear programming problems (NLPs), which may be resolved by an NLP solver. In our work, we also discussed the feasibility and convergence features of an optimal solution that closely matched the original problem.

OUR NEXT EVENT

**10th Global Webinar on
Applied Science, Engineering and Technology**

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<https://www.globalscientificguild.com/applied-science/>