



AUGUST 17-18, 2024 WEBINAR | ZOOM MEETINGS



SCIENTIFIC PROGRAM UK TIME ZONE



GLOBAL WEBINAR ON

ARTIFICIAL INTELLIGENCE & DATA SCIENCE

09:35-10:10

10:40-11:20



Welcome Speech & Opening Ceremony 08:50-09:00

Plenary Forum

09:00-09:35



Prof. Miin-Shen Yang, Chung Yuan Christian University, Taiwan Title: Sparse Fuzzy Clustering Algorithm with Lasso

Dr. Juergen Weichenberger, Schneider Electric, USA Title: Artificial Intelligence and Generative AI and its application in the Industry



Keynote Forum





Dr. David Roldan Martinez, Polytechnic University of Valencia, Spain Title: Multinodal Autonomous Al Agents on Integrations

Miss. Catherine Azam, Humaina, UK

Title: Unlocking Al's Potential Responsibly An Ethical Blueprint for Large Language Models and Data Compliance







11:20-11:50

Dr. Nasrullah K. Khilji, University of West London, UK Title: Domain Applications of Artificial Intelligence in Strategic Portfolio Management

Health Break (11:50-11:55)

Oral Forum

11:55-12:20

Dr. Anastasios Liapakis, New York College, Greece



Title: Fostering Digital Skills in Higher Education: The Case of Computing and ELT Students





Prof. Hind Lamharhar, National Institute of Statistics and Applied Economics, Morocco

Title: Transforming Governance through Generative Al: Case Studies and Implementation Strategies

Mr. Amir Raskin, Senior Data Geneticist, Israel Title: Al – Malicious or Glorifying Consultant?



13:35-14:00





13:10-13:35

Mr. Mohammed Shooqur, National Bank of Kuwait, Kuwait Title: Generative AI and its challenges in Financial Services Industry (FSI)

Mr. Tharun Anand Reddy Sure, ServiceNow, USA

Title: The Role of Mobile Applications and Al in Continuous Glucose Monitoring: A Comprehensive Review of Key Scientific Contributions





Lunck Break (14:00-14:10)

Plenary Forum

14:10-14:45

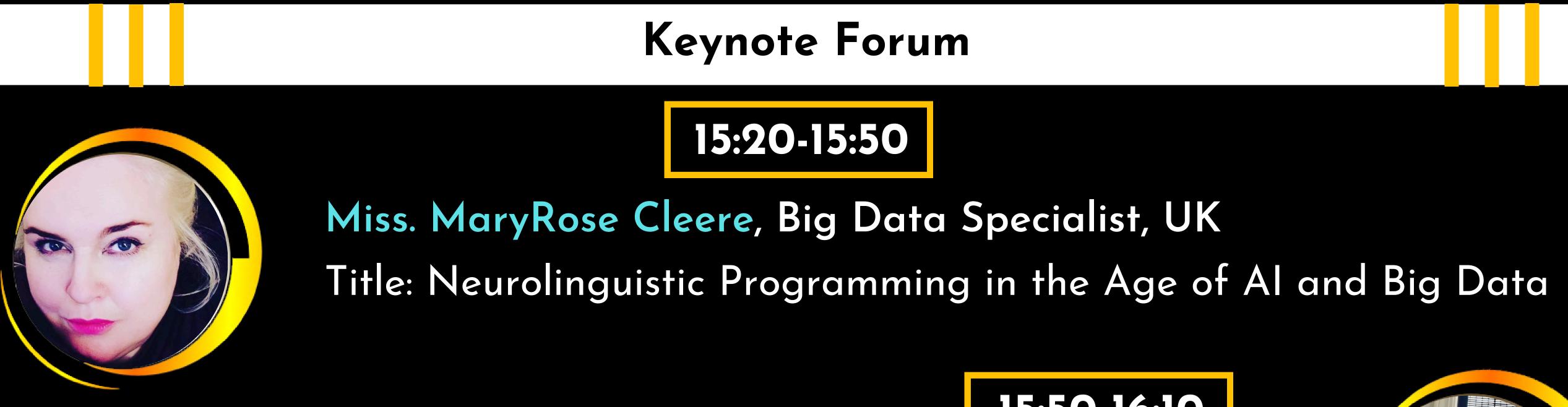


Prof. Francesco larlori, Digital Transformation Strategist, Italy Title: Transforming Knowledge Management and Preserving Heritage through Al Adoption: Enhancing Organizational Efficiency and Continuity

14:45-15:20

Prof. Anna Farzindar, Loyola Marymount University (LMU), USA

Title: Using Art to Highlight the Challenges and Dangers of Generative Al



Mr. Venkata Duvvuri, IBM, USA Title: Enterprise Al apps



Oral Forum

16:10-16:35



Dr. Rehana Lynda Mohamed, St. Anthony's School of Higher Education, USA

Title: Empowering Educators with AI-Driven Curriculum from Kindergarten to College Prep



16:35-17:00



Mr. Ernesto Landa Romero, ISA-62443 Cybersecurity Expert, Perú Title: Key Takeaways from Designing a Resilient Data Security Architecture

Miss. Ivanna Capellaro, Velver Construction Company, Argentina Title: Optimization and Success: Incorporating Artificial Intelligence in Project Management



17:25-17:50



Mr. Kevin Pyles, FamilySearch, USA

Title: The Al You See May Be the Al That Deceives You

17:50-18:15

17:00-17:25

Miss. Sumayya Samreen, Royal Holloway University of London, UK Title: The Role of Al in Revolutionizing Health Care



End of Day-1



SCIENTIFIC PROGRAM UK TIME ZONE



GLOBAL WEBINAR ON

ARTIFICIAL INTELLIGENCE & DATA SCIENCE



Welcome Speech & Opening Ceremony 09:50-10:00



Plenary Forum

09:00-09:35



Dr. Tony De Bree, Tony de Bree Consulting, Training & Coaching, Netherlands

Title: Online Al-Powered Learning Trends

09:35-10:10

10:40-11:10

Prof. Dana York, European Medical Laser Association, USA

Title: PBM is the solution for the future of medicine

Keynote Forum





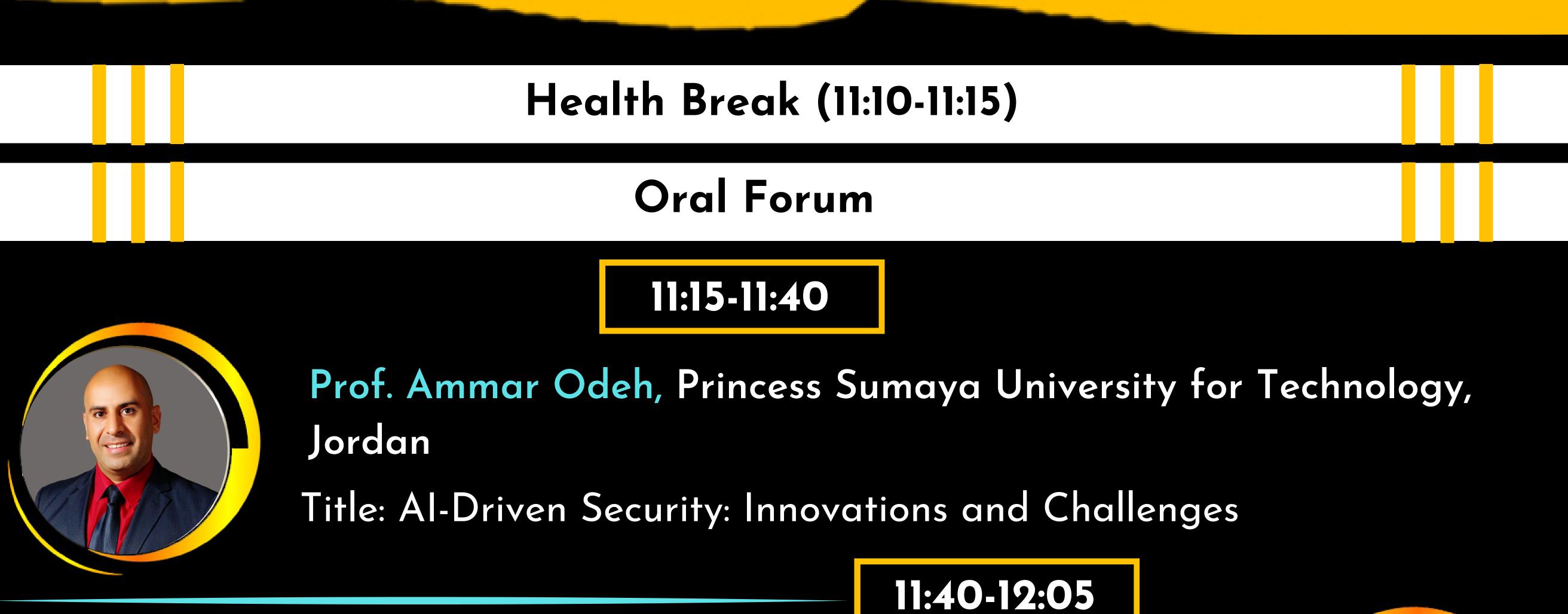
Prof. Alessandro Bartoloni, INFN Roma Sapienza, Italy Title: Ontology Development Using Key Performance Indicators for literature reviews: The radiobiological implications for deep space human exploration case

Prof. Rodolfo Valacca, MediaLife S.r.l., Italy

Title: Artificial Intelligence: your new personal assistant







Prof. Eric Atwell, University of Leeds, UK



Title: EduBots: Chatbots for University Education





Mr. Douglas Amante, TIDO Global Logistics, Nigeria Title: Al-Enhanced LOI Revolutionizes Logistics and Transportation

12:30-12:55

Dr. Rami Ayoob, Spark Information Technology, Bahrain Title: The Role of Al in Digital Transformation







Dr. Raúl Parada, CTTC, Spain

Title: Machine Learning-based Trajectory Prediction for VRU Collision Avoidance in V2X Environments

Lunch Break (13:10-13:20)





13:20-13:50

Dr. Ras Geddes, Geddes Neural Network (GNN), USA

Title: What is the Future of Robotics in AgTech, Educational & Industrial Farming



13:50-14:20



Prof. Massimo Buonomo, International Electrotechnical Commission, Switzerland

Title: Navigating the Intersection of Human Rights and Artificial Intelligence: Ethical and Legal Considerations for Emotion Recognition Systems and Prohibited Practices in the EU

Oral Forum

14:20-14:45

Mr. David Fekete, Syntheticaire, Estonia Title: Accelerating Al Integration: Boosting Your Business

Efficiency by 500%







Mr. Sameer Ranjan, Catenate, USA

Title: Al in Healthcare for modern medicine predictions



Mr. Tyler Suard, Parker-Hannifin Inc, USA Title: RNNs and LSTMs: The Time Travelers of AI Explained Simply





15:35-16:00



Mr. Al Khalil Al-Abdali, Ai Tech Academy, Oman Title: Enhancing Generated Responses Using ChatGPT Prompts: Techniques and Applications

Plenary Talk

Dr. Yosi Amram, AwakeningSI.org, USA 16:00-16:35 Title: Emotional, Spiritual, and Artificial Intelligence: What's their Relationship?







16:35-17:00

Mr. Deepak Gupta, Cars24, India

Title: Multimodal AI Agents

Panel Discussion (17:00-18:00)

Topic: Al and the future of education













Prof. Miin-Shen Yang



Dr. Juergen Weichenberger

Dr. Tony De Bree





Prof. Francesco larlori

Dr. Ras Geddes

Prof. Dana York

Prof. Anna Farzindar





Dr. Yosi Amram





2 GLOBAL WEBINAR ON

ARTIFICIAL INTELLIGENCE & DATA SCIENCE



Prof. Miin-Shen Yang Chung Yuan Christian University, Taiwan

Sparse Fuzzy Clustering Algorithm with Lasso

Abstract:

Clustering is an important tool in data analysis. It aims to discover patterns, relationships, or structures in data sets by partitioning it into clusters according to similarity/dissimilarity measures between data. It had been well applied in machine learning, data mining, information retrieval, social network analysis, image segmentation, and industries. The fuzzy c-means (FCM) clustering algorithm is a fuzzy extension of k-means in which FCM has been widely used in various fields. The fuzzy nature in FCM allows it to handle data points that may belong to multiple clusters with partial membership assignments. In regression analysis, Lasso, standing for "least absolute shrinkage and selection operator" had been used for variable and feature selection subject to the norm constraint. In general, data with a high number of dimensions may include characteristics that are unimportant or sparse. For features to be sparse, the Lasso penalty is capable of being applied to feature weights. A solution to FCM with sparsity is the sparse FCM (S-FCM) clustering. In this study, we propose a new type of S-FCM clustering, called S-FCM-Lasso, in which we use the FCM objective function with a Lasso penalty of feature weights. In our proposed S-FCM-Lasso, the irrelevant features can be diminished towards exactly zero and assigned zero weights for unnecessary characteristics in data sets. Based on various clustering performance measures, we compare the S-FCM-Lasso with some existing sparse clustering algorithms on several numerical and real data sets. Comparisons and experimental results demonstrate that our proposed S-FCM-Lasso has better performance than most existing sparse clustering algorithms. Furthermore, the S-FCM-Lasso not only has the capability to produce quick and efficient results, but also has a feature selection ability by throwing irrelevant features toward zero. This validates efficiency and usefulness of the proposed S-FCM-Lasso algorithm for high-dimensional data sets with sparsity.

Keywords: Clustering, Fuzzy c-means (FCM), Sparse FCM (S-FCM), Lasso, S-FCM-Lasso, Performance measures Biography:

Prof. Miin-Shen Yang received the Ph.D. degree in statistics from the University of South Carolina, Columbia, USA, in 1989. Then, he joined the Faculty of the Department of Applied Mathematics, Chung Yuan Christian University (CYCU), Taiwan. From 1997 to 1998, he was a Visiting Professor with the Department of Industrial Engineering, University of Washington, Seattle, USA. Since 2012, he has been a Distinguished Professor, and now a life Distinguished Professor of the Department of Applied Mathematics, CYCU. He was the Chairperson of the Department of Applied Mathematics, the Director of Chaplain's Office, and the Dean of the College of Science, CYCU. His research interests include applications of statistics, fuzzy clustering, pattern recognition, and machine learning. He was an Associate Editor of the IEEE Transactions on Fuzzy Systems from 2005 to 2011, and is an Editorial Board Member of Electronics (MDPI). According to Stanford University's Top 2% Scientists, he is among top 2% scientists as career impact and also single year impact of 2022 in Artificial Intelligence & Image Processing.









Dr. Juergen Weichenberger Schneider Electric, USA



Artificial Intelligence and Generative AI and its application in the Industry

Abstract:

Artificial Intelligence and Generative AI have impacted Industrial Companies significantly over the last 18 months. At Schneider Electric we are applying novel solutions to our own manufacturing plants as well as we are making them available to our customers in form of new solutions. In this presentation, I will take you through some of challenges, concepts and solutions which we have found for novel industry solutions.

Keywords: Artificial Intelligence, Generative Al

Biography:

Dr. Juergen Weichenberger has 20 years of experience in building complex solutions leveraging advanced analytics, data science, database design, architecture and implementation on various platforms to solve Complex Industry Problems. Working in the AI industry since the mid-1990s, Juergen have built solutions for various industries and leveraged various methods over time. He joined Schneider Electric in 2022 as Vice President at AI New Value Stream. His focus is to produce industry grade solutions, translating the combination of core algorithms, robotic, cybernetics and human intelligence. Industrial Analytics is the fusion of manufacturing, production, reliability, integrity, quality, sales- and market-analytics and covering 10 Industries. By combining skills and experience, we are creating the next-generation AI & ML Solutions for their clients. Leveraging a unique formula which allows us to model some of the most challenging manufacturing problems while building, scaling, and enabling the end-user to leverage the next generation data products. The New Value Streams at Schneider is specializing on Industrial-Grade Challenges where their are applying ML & AI methods to achieve state of the art results. Personally, He is driving his team and his own education to extend the limits of AI & ML beyond the current possible. He hold more than 15 patents and He is working on new innovations. He is working with his partner eco-system to enrich their accelerators with modern ML/AI techniques and integrating robotic equipment that allows him to create next generation solutions.







Mr. Tharun Anand Reddy Sure ServiceNow, USA



The Role of Mobile Applications and AI in Continuous Glucose Monitoring: A Comprehensive Review of Key Scientific Contributions

Abstract:

Continuous Glucose Monitoring (CGM) has transformed diabetes management by providing real-time glucose data through mobile apps. This article explores the integration of Artificial Intelligence (AI) into CGM technology, enabling personalized insights and improved treatment outcomes. Combining mobile apps with AI opens new avenues in diabetes care, promising enhanced quality of life for patients. With ongoing technological advancements, the potential for further breakthroughs in diabetes management is vast. We stand at the threshold of an exciting era in diabetes care, offering hope for a brighter future for millions of individuals with diabetes.

Keywords: Continuous Glucose Monitoring (CGM), Diabetes Management, Real-time Glucose Data, Mobile Apps, Artificial Intelligence (AI), Personalized Insights, Quality Of Life, Future Of Diabetes Care

Biography:

Mr. Tharun Anand Reddy Sure, based in Austin, Texas, has dedicated the past decade to advancing technology across pivotal sectors such as telecommunications, healthcare (focused on Continuous Glucose Monitoring), automotive, and SaaS. His career, rooted in mobile application development, showcases his ability to integrate cutting-edge technologies like Artificial Intelligence, Machine Learning, the Internet of Things, Wearables, and Augmented Reality, consistently enhancing user engagement and satisfaction. With a philosophy centered on exceeding customer expectations, Tharun aims to create intuitive, efficient, and groundbreaking solutions. His impactful work in healthcare has significantly improved health management, while his contributions to the automotive industry have pushed technological boundaries towards more efficient and environmentally friendly vehicles. Tharun has held senior roles at ServiceNow, Dexcom, and Ford Motor Company, and has also worked with Verizon. He holds a Master's degree in Computer Science from Northern Illinois University and a Bachelor's degree in Computer Science from Jawaharlal Nehru Technological University. Recognized globally for his commitment to excellence and innovation, Tharun continues to drive technological advancements and exceptional user experiences.







Miss. MaryRose Cleere Big Data Specialist, UK



Neurolinguistic Programming in the Age of Al and Big Data

Abstract:

Neurolinguistic Programming (NLP) is experiencing a resurgence in the age of Artificial Intelligence (AI) and Big Data. Traditionally focused on human communication and personal development, NLP principles are being applied to unlock the potential of AI for natural language processing (NLP) and communication with machines. This paper explores the current trends in NLP and how it intersects with AI and Big Data. We discuss how NLP techniques like sentiment analysis, machine translation, and chatbot development are being powered by vast datasets and machine learning algorithms. The ability of NLP to extract meaning and context from human language is crucial for AI systems to interact with humans more effectively. Furthermore, the paper explores the ethical considerations of using NLP in AI, particularly regarding potential biases present in large datasets. The responsible integration of NLP principles is essential for ensuring fairness and transparency in AI-powered systems. Finally, the paper highlights the potential future directions of NLP in AI and Big Data. We can expect advancements in areas like dialogue systems, personalized user experiences, and even the development of artificial general intelligence (AGI) capable of more nuanced communication and understanding. In conclusion, this paper demonstrates the renewed significance of NLP in the era of AI and Big Data. As AI systems continue to evolve, NLP will play a critical role in bridging the communication gap between machines and humans, paving the way for a future of more intelligent and interactive technology.

Keywords: Artificial Intelligence, Big data, Natural language processing

Biography:

Miss. MaryRose Cleere is a seasoned data strategist with a unique blend of experience in Big Data, Knowledge Management, and international affairs. Her passion lies in leveraging data and analytics to solve complex challenges and unlock value for diverse organizations and global initiatives. Her multifaceted career path demonstrates a commitment to and a willingness to tackle challenges across sectors. Over seven years of experience as a Big Data Specialist and Knowledge Management Specialist, she has honed her skills in data analysis, cloud technologies (AWS, Kubernetes), and knowledge capture for informed Decision-making & Global Leadership. She holds an EMBA from Quantic School of Business and Technology and a certificate in Big Data and Social Analytics from MIT. Additionally, she possesses a diverse range of certifications in areas like project management, International law, leadership, and fashion design, showcasing her experienced skillset. Looking to the future, She is committed to using her expertise in data, knowledge management, and international affairs to tackle the world's most pressing challenges.







Mr. Joseph Yosi Amram AwakeningSl.org, USA



Emotional, Spiritual, and Artificial Intelligence: What's their Relationship? Abstract:

When we think of AI, we normally think of cognitive intelligence. But what about alternative forms of intelligence: emotional (EI) and spiritual (SI), both proven to be highly valuable? Could machines ever possess emotional or spiritual intelligence, or will those forever stay reserved for us humans? In this presentation, I will be defining what emotional and spiritual intelligences are and explore if machines would be capable of such forms of intelligence. As emotional intelligence can be defined as awareness and regulation of emotion in self and others, such capabilities should not be limited to humans. In fact, several conversational intelligence AI programs have already demonstrated such capabilities. Spiritual intelligence can be defined as the ability to draw on and embody qualities universally hailed by all the worlds major spiritual traditions, including purpose, service, trust, beauty, joy, holism, integrity, egolessness, and wisdom, to name a few. Several of these qualities may be within the scope of what machines may be able to attain, while others are more doubtful. Yet, machines should certainly be capable of supporting the development of such qualities in humans.

Biography:

Mr. Joseph Yosi Amram Ph.D., is a licensed clinical psychologist, a CEO leadership coach, and the award-

winning author of Spiritually Intelligent Leadership: How to Inspire by Being Inspired. Previously founder and CEO of two companies that he led through successful IPOs, Yosi has coached over 100 CEOs many of whom have built companies with thousands of employees and revenues in the billions. With engineering degrees from MIT, an MBA from Harvard, and a Ph.D. in Psychology from Sofia University, he is a pioneering researcher in the field of spiritual intelligence, whose research has received over 1000 citations.







Mr. Venkata C. Duvvuri

IBM, USA



Enterprise Al apps

Abstract:

Enterprise software is being revolutionized by AI. Whether it be Oracle or Servicenow, SaaS clouds are injecting AI intelligence into their offerings. At Oracle marketing cloud this effort resulted in several millions in additional revenue due to satisfied customers. Secondly, IT groups responsible for deploying these applications in clients are taking up their own efforts to buttress these solutions with their first party data AI intelligence. Find out in this talk examples of these offerings and how relatively new startups and their point solutions are changing this landscape.

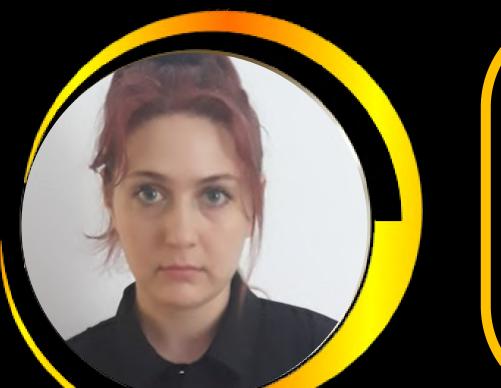
Biography:

Mr. Venkata C. Duvvuri is a doctoral student in the Department of Technology Leadership and Innovation at Purdue University. Additionally, he is a Director & Architect of Data Science at IBM & previously at Oracle Corporation in Redwood City, CA, USA. He loves teaching and is an adjunct faculty member at Northeastern University. He has held several leadership positions in data science at various companies. He holds a Master's degree in Computer Science from the University of Massachusetts Amherst and an MBA from the University of California, Davis.









Miss. Catherine Azam

Humaina, UK

Unlocking AI's Potential Responsibly An Ethical Blueprint for Large Language Models and Data Compliance

Abstract:

As artificial intelligence becomes increasingly sophisticated and pervasive, it is crucial to ensure its development and deployment align with ethical principles that safeguard human rights, promote fairness, and uphold democratic values. This lecture delves into the critical aspects of Ethical AI, exploring the challenges posed by advanced AI systems and the measures necessary to mitigate potential risks. We will examine the importance of data governance, algorithmic transparency, and accountability, as well as the need to address issues of bias, privacy, and security. Specifically, we will discuss the role of regulatory frameworks, such as the EU AI Act, in establishing standards and guidelines for the responsible use of AI. Through this comprehensive analysis, we aim to equip attendees with a deeper understanding of the ethical considerations surrounding AI and the strategies required to harness its potential while upholding ethical principles.

Keywords: Al ethics, Algorithmic bias, Data governance, Transparency, Accountability

Biography:

Miss. Catherine Azam is a founder and CTO of Humaina, Catherine dedicated 10 years to developing Al solutions with positive societal impacts. Her expertise in Natural Language Processing (NLP) has been pivotal in creating advanced AI models for various applications. At Raincoat, she focussed on leveraging AI to tackle climate change. With proficiency in Python, IBM, AWS, and a Google Cloud Professional Data Engineer certification, she excels in building robust ETL pipelines and fine-tuning NLP and computer vision models. Previously, as CTO of GoBubble, Catherine single-handedly developed the patent-pending Emotion AI algorithm to enhance safety on Social Media. Her career also includes roles at Siemens, SKY, and IBM. Committed to ethical AI, she has lea innovative projects and engage diverse global stakeholders to foster a healthier digital ecosystem.







Dr. Tony de Bree Tony de Bree Consulting, Training & Coaching, Netherlands



Online Al-Powered Learning Trends

Abstract:

Wanting to identify online trends in personalized Al-powered learning, we need to make a distinction between two different 'online worlds': 1) 'learner centric' Al-powered skill-based fast learning on different types of Al-powered online learning platforms including online consulting and coaching and digital products for self-study and 2) 'professor-centric' Al-powered formal education and training.

The first category is growing much faster than the second one within the context of the great Al-layoff in for instance marketing, finance, ICT and many creative jobs in corporates, large banks and large insurance companies for instance and the rapid growth of the gig economy as substitutes for managers & employees with a fixed-contract.

The learning objectives for these people are very different: 1) continuous relevant personal life-long learning & right-skilling if you want to become a successful solopreneur, founder of an Al-powered startup, growing & scaling an Al-powered scaleup or working in an Al-powered SME. They need to survive the online shakeout, 'staying small' with the virtual organization as basic organizational structure in an Al-powered organizational model and 2) managers and employees that want to get/need to get a diploma and/or certificate from a reputable business school or university. Tony will share 1) personal learning experiences after 2001, after 2011 leaving the corporate rat race and after 2022 when he had to pivot his business model fast to survive the democratization of Al as Al-powered entrepreneur. Fast learning relevant Al related soft- and hard skills including Al-powered writing & graphic design as virtual solopreneur. Leveraging the knowledge & skills of people in his virtual business ecosystem including people from online gig platforms and 2) online research using different Al-powered tools.

Keywords: Onlinetrends, Alpoweredlearning, Learnercentriclearning, Lifelonglearning, Allayoff, Gigeconomy

Biography:

Dr. Tony de Bree worked 26 years in Financial Services in different roles including as pm Computer Based Training (CBT) @ICT T&D and as Head of Educational Technology. He obtained an EEP MBA at leading global business schools, a PhD in BA & knowledge management on 'digital transformation of financial services companies' & FinTech @MIT. While working at Corporate IT Strategy, he started making money online at home & as digital nomad with eBooks. In 2011, he left the corporate rat race & became a successful virtual solopreneur. Helping entrepreneurs to start, grow & scale their business 'staying small' with ICT & AI.



2 GLOBAL WEBINAR ON

ARTIFICIAL INTELLIGENCE & DATA SCIENCE



Prof. Francesco larlori Digital Transformation Strategist, Italy



Transforming Knowledge Management and Preserving Heritage through AI Adoption: Enhancing Organizational Efficiency and Continuity

Abstract:

The transformative impact of Artificial Intelligence(AI)modifies the knowledge management within organizations. The AI adoption fundamentally alters how knowledge is captured, stored, retrieved, and utilized, driving efficiencies and innovation while ensuring the retention of institutional memory. The integration of AI technologies such as machine learning, natural language processing, and data analytics enhances the ability to process vast amounts of information, uncover patterns, and generate insights that were previously unattainable. AI-powered tools facilitate dynamic and adaptive knowledge bases, enabling real-time updates and personalized information dissemination, which are crucial for maintaining the continuity of organizational knowledge and heritage. Furthermore, AI fosters improved collabora;on and decision-making by connecting employees with relevant expertise and resources. This transformation necessitates addressing challenges related to data privacy, ethical considerations, and the need for continuous learning and adaptation. Ultimately, the adoption of AI in knowledge management not only streamlines organizational processes but also empowers employees, especially new hired and able to manage technology fast.

The Knowledgeable Workers Become Superfluous?

The adoption of AI in knowledge management raises concerns about the relevance and utility of highly knowledgeable workers. However, these workers will become crucial, their roles will evolve, and their contributions will become even more valuable in the fields of Enhanced Decision-Making and to correct Train and Supervise of AI Systems. They can advise on the innovation and problem-solving preserving the organizational heritage and enhancing a good and fruitful human-AI collaboration. In conclusion, while AI significantly transforms knowledge management practices, it does not render knowledgeable workers unnecessary Instead, it shifts their roles towards more strategic, innovative, and supervisory functions, ultimately enhancing the value they bring to the whole organization.

Biography:

Prof. Francesco larlori is a visionary and facilitator who has been at the forefront of driving digital transformation in organizations since the 1990s, leveraging extensive technological expertise. With nearly 30 years of global experience in sales, strategic planning, and business development, spanning various industries including major players in the global information technology, finance, media, and mobile operator sectors. Constantly driven by a passion for learning and sharing knowledge, always willing to adapt and educate. A skilled organizer and team player, renowned for identifying and capitalizing on emerging business opportunities. Possesses in-depth knowledge of potential new products and services, both from a business and technological perspective. Excels as an empathetic storyteller, captivating audiences in keynote speeches and academic institutions, instilling a hunger for knowledge that resonates with the essence of our world and its continual improvement. A visionary who constantly seeks metaphors and paradigms, exploring the depths of our existence. Passionate about the practical applications of science in our everyday lives, with a keen interest in music, arts, painting, and various forms of human expression. Offers valuable advisory services to investors and multinational companies venturing into new geographic markets, including Europe, the USA, and Africa. Actively collaborates with the United Nations in efforts to uplift developing countries. Additionally, holds roles as an independent journalist, sought-after keynote speaker at international events, columnist, and esteemed university lecturer.







Mr. Alessandro Bartoloni

INFN Roma Sapienza, Italy



Ontology Development Using Key Performance Indicators for literature reviews: The radiobiological implications for deep space human exploration case Abstract:

The Alpha Magnetic Spectrometer Roma Sapienza research group has been active in precision cosmic ray and space radiation component measurements since 2001. Recently, there has been a stro ng effort to investigate the connection with space radiobiology, which will be crucial in the coming years due to the renewed human space exploration of deep space, such as missions to the Moon and Mars. In this context, we initiated an extensive literature review focused on the radiobiological effects of solar-generated radiation (e.g., Solar Flares, Solar Energetic Particles). In doing so, we found it crucial to conduct preliminary work to create a general-purpose ontology, primarily based on the definition of radiobiological Key Performance Indexes. The application of this ontology to scientific literature databases (e.g., PubMed) and the use of AI techniques to evaluate the relevance of papers to the topic of interest will be discussed in the talk, along with the preliminary results of the work done in this context.

Keywords: Scientific Literature reviews, Onthologies, Space Radiation, Space Human Exploration

Biography:

Mr. Alessandro Bartoloni has 30 years of experience in scientific international collaboration at the Italian Institute of Nuclear Physics (INFN) and the European Organization for Nuclear Research, known as CERN. He has held various roles in computer architecture design, control system development, and power supply system design. For many years, he participated in the development of an experiment at CERN that observed a new particle consistent with the predicted Higgs boson.

Holding an MSc in Electronics Engineering, Prof. Bartoloni was also a lecturer at the Faculty of Engineering at Sapienza University of Rome, where he was responsible for courses on computer science. Since 2000, he has been involved in the Alpha Magnetic Spectrometer (AMS) collaboration AMS02. AMS02 is a state-of-the-art particle physics detector designed to operate as an external module on the International Space Station.

His current principal fields of interest are Cosmic Rays Physics, Space Radiation Science, and Space Radiobiology.







Mr. Ammar Odeh

Princess Sumaya University for Technology, Jordan



Al-Driven Security: Innovations and Challenges

Abstract:

In the rapidly evolving landscape of cybersecurity, Artificial Intelligence (AI) has emerged as a powerful tool, offering innovative solutions to complex security challenges. The theme "Al-Driven Security: Innovations and Challenges" aims to explore the intersection of AI and cybersecurity, delving into how AI technologies can enhance the protection of digital assets, detect and mitigate threats, and ensure data integrity. This conference will bring together researchers, practitioners, and industry experts to discuss cutting-edge AI applications in cybersecurity. Topics will include machine learning algorithms for threat detection, AI-based anomaly detection systems, and the role of AI in automating response mechanisms. Special attention will be given to real-world case studies demonstrating the effectiveness of AI in preventing cyberattacks and securing sensitive information. However, the integration of AI into cybersecurity also presents significant challenges. Issues such as the ethical implications of AI, the potential for adversarial attacks against AI systems, and the need for transparency and explainability in AI models will be critically examined. The conference will foster discussions on developing robust and resilient AI systems that can withstand evolving cyber threats. By addressing both the opportunities and challenges, this conference seeks to provide a comprehensive understanding of Al's role in transforming cybersecurity. Participants will gain insights into the latest research, best practices, and future directions in Aldriven security, empowering them to enhance their cybersecurity strategies and contribute to a safer digital world.

Keywords: Al-Driven Security, Cybersecurity Innovations, Machine Learning in Threat Detection, Anomaly Detection Systems, Ethical Implications of Al, Adversarial Attacks on Al

Biography:

Mr. Ammar Odeh is an adjunct lecturer at the University of Bridgeport and the Director of the Training and Consulting Center at Princess Sumaya University for Technology. He specializes in artificial intelligence research focused on cybersecurity and has extensive experience in AI development, blockchain technology, and economic growth. His work has significantly contributed to advancements in technological and economic sectors.







Prof. Rodolfo Valacca MediaLife S.r.l., Italy



Artificial Intelligence: your new personal assistant

Abstract:

In this presentation are explored challenges and opportunities of Artificial Intelligence (AI) from the user's point of view. After providing some premises and definitions to frame what AI is and how it "reasons", is described the impact that the AI Revolution will have on all of us, both as people and as workers (at all levels, from workers to top managers, from teachers to freelancers). In the first part, the state of the art on generative AI is analyzed. The pros and cons of closed models will be analyzed (e.g. ChatGPT, Gemini, Copilot, Claude), open models (e.g. Llama, Mistral, Grok) and Small Language Models (SLM), AI models that are well suited to being run directly on smartphones and laptops. In the second part, specific LLMs and chatbots are explored for generating text, translations, code/software, images, audio, video and an overview of related prompt engineering indications. Finally, we illustrate how to integrate AI into your daily routine and the golden rules for responsible use of AI. During the module there will be moments of interaction with the audience and at the end of the module a summary to reinforce the learning of the key elements.In conclusion, AI is an engine of change that will shape our future. Understanding its opportunities and threats is essential to face the challenges of our world which is evolving ever faster, both for consumer users (who will have to adapt this great change) and for companies, institutions and research centers (who will have to find the best way to lead the change and satisfy the needs of the target consumer).

Keywords: Artificial Intelligence, AI, Generative AI, LLM, Chatbot, Prompt Engineering Biography:

Prof. Rodolfo Valacca is a Management engineer, Senior Manager/Executive Consultant specialized in digital innovation start-ups, University Professor (e.g. at the Polytechnic of Milan, University of Turin) and Author of Publications (e.g. International Journal of Electronic Business, II Sole24 Ore). For some years he has been dealing with Artificial Intelligence. Trained in AI at the Kellogg Business School of Chicago, He has worked in NLP, prompt engineering and AI-generated video. Today he is recognized by LinkedIn as "Top Artificial Intelligence".



2^{md} GLOBAL WEBINAR ON

ARTIFICIAL INTELLIGENCE & DATA SCIENCE



Dr. David Roldan Martinez

Universitat Politécnica de Valencia, Spain



Multinodal Autonomous Al Agents on Integrations Abstract:

In today's rapidly evolving technological landscape, the demand for seamless and efficient API integrations has never been higher. Traditional methods, plagued by technical complexity, high costs, and resource-intensive processes, often fall short of meeting the dynamic needs of modern businesses. Enter Multimodal AI Agents—an innovative solution poised to revolutionize the way we approach API integrations. This talk will delve into the transformative potential of Multimodal AI Agents in the realm of API integrations, with a particular focus on customer service operations. By leveraging the capabilities of these advanced AI systems, businesses can achieve unprecedented levels of efficiency, accuracy, and scalability in their integration processes. We will explore how Multimodal AI Agents navigate the intricacies of API ecosystems, streamline complex workflows, and significantly reduce time-to-market for new product launches.

Keywords: Multimodal AI Agents, API Integrations, Customer Service Automation, Data Management, Operational Efficiency

Biography:

Dr. David Roldan Martinez has a 20 years of experience in software systems architecture holding a PhD in

Telecommunications Engineering. He is also an Associate Professor at the Universitat Politècnica de València and a researcher at VRAIN, where he is working on a second PhD. His expertise lies in APIs and their applications across sectors like Banking, Insurance, and Retail, as well as in Artificial Intelligence and Digital Transformation. Additionally, He is a prolific scientific-technical popularizer with over twenty books, and he have a keen interest in personal development and coaching.







Mr. Al Khalil Al-Abdali

Ai Tech Academy, Muscat, Oman



Enhancing Generated Responses Using ChatGPT Prompts: Techniques and Applications Abstract:

This research explores the use of ChatGPT prompts to enhance the quality and relevance of generated responses in various applications. ChatGPT, a language model developed by OpenAl, has shown immense potential in generating human-like text. This study focuses on techniques for optimizing prompts to improve response accuracy, coherence, and usefulness. By analyzing different prompt engineering strategies, the research identifies best practices for crafting prompts that lead to better contextual understanding and more precise outputs. Applications in customer service, content creation, education, and personal assistance are examined to illustrate the practical benefits of improved prompt engineering. The findings underscore the importance of prompt design in maximizing the effectiveness of ChatGPT, providing insights for developers and users to leverage this AI tool more efficiently.

Keywords: ChatGPT, Prompt engineering, Al responses, Natural language processing, Al applications Biography:

Mr. Al Khalil Al-Abdali is the CEO of AI Tech Academy and a lecturer at Gulf College Oman. Holding a master's degree in Cloud Computing, Big Data, and Internet of Things, he specializes in training AI tools and creating AI tools for social media. His work focuses on leveraging AI technologies to enhance various domains, including optimizing ChatGPT prompts to improve the quality of generated responses.







Mr. David Fekete

Syntheticaire, Estonia



Accelerating Al Integration: Boosting Your Business Efficiency by 500% Abstract:

This presentation, "Accelerating AI Integration: Boosting Your Business Efficiency by 500%," is designed to guide you through the transformative process of AI adoption, showcasing strategies that can dramatically enhance your integration speed and efficiency.

We will delve into practical methodologies, from optimizing data management to leveraging pre-trained models and automation tools. The session will also cover case studies from diverse sectors including hospitality, healthcare, telecommunication, finance, and manufacturing, highlighting real-world successes and challenges. Attendees will gain insights into:

- Identifying and overcoming common barriers to Al integration
- Aligning Al solutions with business needs to ensure maximum impact
- Best practices for preparing your data infrastructure
- Designing robust software architecture and MLOps pipelines for Al integration
- Techniques for rapid deployment and scaling of AI solutions

- Evaluating AI models based on business usefulness and performance metrics
- How to measure and maximize the ROI of AI investments

Whether you're at the beginning of your AI journey or looking to enhance your existing strategies, this session will equip you with the knowledge and tools needed to achieve a 500% increase in your AI integration speed.

Keywords: Case-study, AI, Machine learning, LLM, GenAI, Business

Biography:

Mr. David Fekete is a Al expert and manager with over 8 years of experience across various sectors, including hospitality, healthcare, telecommunications, finance, and manufacturing.







Mr. Marcello Fonseca

Rentrr, Canada

Optimizing Al Models with Transfer Learning and Hyperparameter Tuning Abstract:

In the rapidly evolving field of artificial intelligence and machine learning, optimizing model performance is essential for achieving impactful results. This session of the global webinar will explore the integration of Transfer Learning and Hyperparameter Tuning to enhance the efficiency and accuracy of AI model training. Transfer Learning allows models to leverage pre-trained knowledge from existing models, addressing new tasks with limited data and significantly reducing training time. This technique is particularly beneficial in applications such as image recognition and natural language processing. The session will cover the selection of appropriate pre-trained models, adaptation strategies, and fine-tuning processes. Additionally, the webinar delves into Hyperparameter Tuning, a critical process for optimizing model performance by selecting and adjusting hyperparameters. Various tuning methods, including grid search and random search, will be discussed. Practical guidance on implementing these techniques using popular tools and frameworks will be provided, enabling participants to efficiently navigate the hyperparameter space. The combined approach of transfer learning and hyperparameter tuning offers a robust framework for building high-performing AI models with reduced resource expenditure. Attendees will gain actionable insights through practical examples and demonstrations, helping them apply these advanced techniques to real-world problems. This session is ideal for AI practitioners, data scientists, and researchers aiming to advance their skills in efficient model training and achieve cutting-edge results.

Keywords: Transfer learning, Hyperparameter tuning, AI models, Machine learning, Optimization

Biography:

Mr. Marcello Fonseca is a marketing professional with a BAC in Marketing and Al/ML enthusiast, now pursuing a CS degree in software engineering. He has over two years of experience studying Al and ML, focusing on building solid, performant models for various use cases. Hewas accepted into the NextAl bootcamp in Montreal thanks to my Al yoga platform using computer vision. Currently, he is building his Al startup, Rentrr, in the buildspace s5 program, aiming to innovate in the property management sector.







Mr. Ernesto Landa Romero

Cybersecurity Expert, Lima, Perú



Key Takeaways from Designing a Resilient Data Security Architecture

Abstract:

Nowadays, there is no doubt that it is crucial to implement cybersecurity standards and practices to protect the integrity, confidentiality and availability of data and models. In a world where data is an invaluable resource for any organization, defending it against unauthorized access, alterations, and security breaches is not only an ethical obligation but also a strategic priority. For this reason, cybersecurity plays a very important role in achieving this goal, as it has become a key component to ensure the sustainability, success, and integrity of Data Science projects. Through cybersecurity risk assessment, organizations can gain a comprehensive understanding of the threats they face. In this presentation, we will explore the importance of incorporating cybersecurity practices into each phase of a Data Science project's lifecycle, understand its threats and vulnerabilities, as well as the unique security challenges of Data Science projects and the essential technologies and strategies to counter them. Finally, we will reflect on the need for ongoing collaboration between data scientists and cybersecurity experts to ensure the reliability and success of data-driven initiatives.

Keywords: Cybersecurity, Integrity, Sixth, Edition, Self-discipline

Biography:

Mr. Ernesto Landa Romero has more than 16 years of experience in Information Technology and Telecommunications in the Energy and Hydrocarbons Sector. He currently leads the Information Security Area of Transportadora de Gas del Perú (TGP), a company specialized in the management, operation and maintenance of infrastructure in the energy sector. Specialist in Information Security and Cybersecurity in Critical Infrastructures, has the international certificationsISA-62443 EXPERT. Member of the Industrial Cybersecurity Committee of the Regional Association of Petroleum, Gas and Biofuels Sector Companies of Latin America and the Caribbean (ARPEL) and Regional Coordinator of the Center for Industrial Cybersecurity (CCI).



2^{md} GLOBAL WEBINAR ON

ARTIFICIAL INTELLIGENCE & DATA SCIENCE



Mr. Douglas Amante TIDO Global Logistics, Nigeria



AI-Enhanced LOI Revolutionizes Logistics and Transportation

Abstract:

Douglas Amante will give a presentation on our innovative project, AI-Enhanced LOI, which aims to employ artificial intelligence to revolutionize client interactions, decision-making procedures, and operations in the trucking sector. By utilizing AI's potential, this groundbreaking project seeks to transform transportation and logistics systems. Douglas Amante is improving overall operating efficiency, streamlining freight management, and optimizing route planning with the use of machine learning algorithms and advanced data analytics. Furthermore, AI is enabling us to make data-driven decisions that optimize the use of resources, cut expenses, and ultimately benefit our stakeholders and clients. Douglas will discuss how these developments are opening the door to a more adaptable and sustainable trucking ecology, in which every link in the supply chain is skillfully managed to satisfy changing consumer preferences and meet changing market demands.

Keywords: Artificial intelligence, Blockchain, Innovation, Logistics, Trucking.

Biography:

Mr. Douglas Amante has made major contributions to the advancement of cutting-edge artificial intelligence technologies, most notably through his work on algorithm design and implementation for Sophia's robot discourse system at SingularityNET. By using advanced algorithms, he has significantly improved Sophia's capacity to interact effectively with people, propelling robotic communication forward. Douglas Amante, who is keenly interested in growing technical developments and their impact, is aware of the changing expectations for sustainable and personalized digital experiences. His current emphasis is on pioneering creative methods to product delivery and design, employing generative AI models to transform customer service and improve user experiences throughout the world, with experience in South America, South Asia, APAC, and Global.







Mr. Tyler Suard

Parker-Hannifin in, USA



RNNs and LSTMs: The Time Travelers of AI Explained Simply Abstract:

Transformers are hot right now, but do you understand the underlying concepts? Al superstar Tyler Suard walks through the RNN and LSTM neural networks, using words on a conveyor belt as an example for how these complex neural networks can predict the next word in a sentence. Forget the jargon – this session is all about making the complicated feel like a walk in the park. Whether you're an Al novice or a seasoned pro looking to brush up on the basics, Tyler's engaging style and knack for breaking down intricate concepts will have you nodding along and chuckling at how easy it all seems. You won't believe how easy it is to understand complicated topics, when you have a qualified teacher to guide you!Tyler simplifies these complex topics with humor and clarity, ensuring you'll walk away with a newfound appreciation for the old-school cool of RNNs and LSTMs

Keywords: Deep learning, AI, Neural networks, Time series, RNN, LSTM

Biography:

Mr. Tyler Suard is a Senior AI Researcher and Developer at Parker-Hannifin inc. Tyler has worked for Apple and Meta, and has contributed to packages like ensorflow, PyTorch, Hunggingface Transformers, and Autogen.

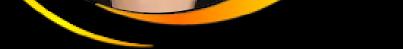
He loves 3D Printing, cats, and 3D printing cats.







Miss. Saartje Ly Simple Analytics, New Zealand



Building a company and an app in a week using Al Abstract:

I studied Data Science, but the intriguing story is how I built a company and an app in a week using AI. I run an Instagram account called FodmapAuckland where I review restaurant menus to identify low-FODMAP dishes. Just over a week ago, I brainstormed ways to make this process easier and more accessible for people. This led to the idea for my app, FODMAP Menu. You simply take a picture and it tells you what dishes are low-FODMAP or could be made low-FODMAP. Using Chat-GPT, I generated everything from app and company names to the privacy policy, and even wrote all the code for the app. Before this, I had never touched Swift, but with the help of Chat-GPT, I managed to develop a complete app in a very short time. This experience demonstrates the incredible power of AI. It enhances our capabilities rather than taking away our jobs. The journey of creating my app has shown me that AI is a valuable ally in innovation and productivity, empowering individuals to achieve more in less time. Through this process, I have gained an appreciation for the potential of AI to transform industries and improve lives.

Keywords: AI, Chat-GPT, App, Company, FODMAP

Biography:

Miss. Saartje Ly founded LOWFOD Living to improve the lives of people with IBS, particularly those on a low FODMAP diet. Ly developed the FODMAP Menu app, which uses GPT to help users identify low-FODMAP options on restaurant menus. Users can take a photo of a menu to quickly find safe items based on their dietary needs. Ly graduated with a degree in Data Science in 2024, building a strong foundation in data analysis, machine learning, and software development.







Miss. Ivanna Capellaro

Velver Construction Company, Argentina



Optimization and Success: Incorporating Artificial Intelligence in Project Management Abstract:

In the era of Artificial Intelligence, project leaders accept the challenge of integrating different technological innovations to our workspaces. In this context, we ask ourselves: How is it possible to successfully use AI to improve Project Management? As AI is becoming an indispensable tool to optimize resources, improve decision making and increase efficiency, project management professionals must analyze several critical aspects to maximize its positive impact and minimize potential risks. Through examples and experiences, we will see the importance of understanding, updating and making the right choice of available technologies that meet the specific objectives of the project and the organizational needs of each company. We will talk about the quality, integrity and accessibility of data, as well as the challenge of taking care of privacy and ethics in its use. The success of any good management will facilitate the acceptance and collaboration of the multidisciplinary teams involved. The current and future organizational changes will be around this revolution that we have to live and manage within different industries and methodologies. Don't be left out, we will be waiting for you at HK Conferences to hear this presentation and much more!

Keywords: Project management, Challenge, Success, Optimization, Business, Artificial intelligence.

Biography:

Miss. Ivanna Capellaro is from Argentina and she works in Project Management and Business Analytics. She has a background in Sociology and Business Administration. Her experience includes working in areas such as construction and architecture, agro technologies, sustainability, culture and visual arts. She had the honor to represent his country in the World Youth Festival 2024 in Sochi - Russia. where she participated in the direction of the project "World Peace Music Festival - Moscow" with young people from 17 countries. She is currently working and training to keep growing.







Mr. Amir Raskin

Data and Analytics Strategic Consultant, Israel



Al - Malicious or Glorifying Consultant? <u>Abstract:</u>

The rise of Artificial Intelligence (AI) has captivated the attention of managers and professionals across all industries. A key question lies in how we'll coexist with these intelligent machines. We grapple with uncertainties: How much trust will we place in Al's capabilities? How will it impact our personal productivity? Can Al become a trusted colleague, or even a friend? Companies must proactively address these concerns from an organizational standpoint. A complete overhaul of various processes and data management is on the horizon. Amir's upcoming session delves into this "new way of doing things" (modus operandi). He'll focus on the evolving landscape of private, corporate, and public data. This includes exploring how these data spheres will interact and the ownership models that will emerge. Our journey begins with the individual. AI has the potential to unlock our creativity, yet it could also nudge us towards conformity. From this personal lens, we'll then shift to the organizational level, examining the opportunities and challenges that AI presents for businesses. The session promises a deep dive into the massive changes we'll face in the data arena, whether as employees, entrepreneurs, stakeholders, or managers. Real-world examples, along with the latest research and facts, will provide a solid foundation for understanding this transformation. If you're curious about how your relationship with data will evolve in the next 5-10 years, across all aspects of your life, then this session is designed for you. Let's prepare ourselves for the exciting, Al-driven era we find ourselves in, in 2024 and beyond! Keywords: Al work, Al productivity, Al data ownership, Al creativity, Data trends, Al business **Biography**:

Mr. Amir Raskin is a Experienced manager with vast experience in large-scale transformation projects and units at many financial sector players, Including banks (commercial and central), credit card companies, insurance companies, and investment houses. He has led management and sales of substantial and complex advanced data and analytics units, accounts, ecosystems, and solutions. such as created large-scale data and analytics programs, Co-founded and managed two data science startups, Co-led data and CX consultancy firms, Led large-scale and global data projects, Co-founded data aggregation startup acquired by Oracle, led the Israeli practice of Harvard's Dr. Norton and Kaplan Strategy Execution.







Dr. Rehana Lynda Mohamed St. Anthony's School of Higher Education, USA



Empowering Educators with Al-Driven Curriculum from Kindergarten to College Prep Abstract:

Empowering the next generation of leaders and innovators, the ESTREAM curriculum offers a transformative educational experience for students from Kindergarten to a dedicated 8-week college prep course. This comprehensive program transcends learning by integrating STEAM (Science, Technology, Engineering, Arts, Mathematics) with entrepreneurial studies and research. Students develop a powerful arsenal of skills: critical thinking, problem-solving, creativity, collaboration, and social-emotional intelligence. ESTREAM is enabled by a partnership with cutting-edge edtech organizations to propel students beyond traditional classrooms. In particular, MegaMinds 3D's immersive learning environments and Edm8ker's Eddy teacher platform, powered by Generative AI, empower teachers to deliver project-based learning with real-world applications, at scale. These tools tackle crucial future-ready skill sets like Design Thinking, AI and Machine Learning, Programming and Coding, and Simulation and Modeling. ESTREAM ensures graduates are academically prepared for their chosen college and future career path. Their growth mindset, strong social-emotional intelligence, technical proficiency, and entrepreneurial spirit equip them to thrive as global citizens and become the changemakers of the future demands.

Keywords: ESTREAM curriculum, 21st century skills, Problem-solving, Research, Entrepreneurial studies, Projectbased learning

Biography:

Dr. Rehana Lynda Mohamed has passionate education strategist with over 20 years of experience. I specialize in crafting innovative learning programs that drive student success. With dual EdDs in Educational Technology and Leadership, I consults for schools and curriculum development (ESTREAM). As an Intel SFI Ambassador and co-organizer of NYC METAVERSE, I explore the future of education in the metaverse. I integrate AI and 3D immersive learning to create cutting-edge educational experiences, empowering students to shine. Let's build wave-making learning environments for future-ready students.







Prof. Hind Lamharhar

INSEA, Morocco

Transforming Governance through Generative AI: Case Studies and Implementation Strategies Abstract:

In recent years, the field of large language models (LLMs) and generative AI has seen significant the oretical advancements. However, the practical application of these technologies remains underexplored, particularly in the context of governmental use. This presentation aims to bridge the gap between theory and practice by showcasing a real-world use case of building a system using generative AI, specifically LLMs and retrieval-augmented generation (RAG). Drawing from my extensive experience in the domain, I will demonstrate how generative AI can unlock and exploit the rich, yet often inaccessible, knowledge within governmental and public

administration sectors. The first part of the talk will focus on improving access to this underutilized information and the benefits this can bring to various stakeholders, with a special emphasis on the Moroccan government. The second part will address the challenge of selecting and implementing best practices at each stage of developing systems based on LLM technology. I will share insights into efficient system design and deployment, ensuring that these advanced technologies are not only theoretical constructs but are tested and proven in real-world scenarios. Additionally, I will highlight a critical issue in the Moroccan research landscape: the predominant focus on the theoretical aspects of LLMs, with insufficient emphasis on practical, real-world applications. By presenting a comprehensive case study of deploying a knowledge extraction system for a Moroccan public administration, I will illustrate the tangible impact of these technologies on the economy and governance. Furthermore, this talk will outline a generic approach with best practices for using generative Al across various use cases. It will provide guidelines on how to effectively use these technologies and collaborate, defining the necessary and most important aspects for users. This approach will ensure that generative AI solutions are not only implemented efficiently but also cater to the specific needs and contexts of different stakeholders. This system, designed to process over thousands of documents in various domains related to customs and commerce, serves as a model for how generative AI can be effectively utilized to make hidden knowledge accessible and actionable. The goal of this presentation is to offer a clear roadmap for leveraging LLMs within the Moroccan government and beyond, ultimately fostering a more informed and efficient public sector.

Biography:

Prof. Hind LAMHARHAR is a professor and a senior NLP and data engineer with a strong theoretical and practical background in both filed higher education and industry. She has working in many CS departments (INSEA: Institute of Statistics and Applied Economics, Hightech: School of Engineering and Management), Mohamed V university, Mohammadia School of Engineering). She is a member of a Decision Support System team at the Moroccan ministry of Economy and Finance. Her main activities are related to AI (ML, DL and NLP), Business Intelligence and Data Analytics. She had the opportunity to conduct several researches related in AI.







Dr. Raúl Parada

CTTC, Spain



Machine Learning-based Trajectory Prediction for VRU Collision Avoidance in V2X Environments Abstract:

The fifth generation (5G) of communication networks aims to accelerate the adoption of incipient vertical industries which will leverage innovative smart applications and services such as Cooperative, Connected and Automated Mobility. One of the objectives globally within that area is reducing to zero the number of fatal vehicle accidents. Unfortunately, human errors are the main cause of them, where vulnerable road users (VRUs) are involved in half of the cases. A possible approach to reduce accidents is estimating the probability of collision between two vehicles based on their estimated trajectories. These trajectories are usually tracked on-board using sophisticated devices such as cameras and LiDAR. However, VRUs are generally not equipped with such equipment and, ideally, VRUs carry smartphones with active geolocation capabilities based on satellite-based positioning systems. In this paper, we propose a novel vehicular service based on a regression algorithm to predict trajectories by uniquely using Cartesian coordinates. We compare different types of regression techniques in terms of prediction time window, position accuracy and processing time using Weka. Results show that the Alternating Model Tree (AMT) technique can predict the next position with an error of less than 3.2 centimeters, increasing up to 1 meter when predicting the next 5 positions with a period of 1 second between consecutive positions. In this case, a prediction time window of 5 s is processed within 1.25 milliseconds. AMT resulted as the lowest complex and most accurate algorithm in a multiple-step prediction position.

Keywords: ITS, Collision Avoidance, Trajectory Prediction, VRU

Biography:

Mr. Raúl Parada is a Recognized researcher at Centre Tecnològic de Telecomunicacions de Catalunya in the Research Unit of Sustainable Artificial Intelligence focusing on connected and autonomous vehicles in V2X, sustainability 5G/6G and brain-inspired neural networks. He has a two-year post-doctoral experience in the DEI at the UniPD. He got his PhD in the doctoral programme Information and Communication Technologies at UPF in Barcelona in 2016. His research was about RFID, ML and Antenna Design. He graduated in the MSc in Telecommunications at DTU in 2012 and his bachelor degree at UPC in 2008 doing his diploma thesis at the TUV.



2^{md} GLOBAL WEBINAR ON

ARTIFICIAL INTELLIGENCE & DATA SCIENCE



Dr. Nasrullah Khan Khilji University of West London, UK



Domain Applications of Artificial Intelligence in Strategic Portfolio Management Abstract:

This research study examines the domain applications of AI in project management for enhanced strtaegic protolfio managemnt decisions. This research study is conducted to explore new insights in which digital technologies and ICTs can better serve the interests of organisational strategic portfolio drive with the help of Al to manage data, information and knowledge to accomplish project strategic benefits. The research study is carried out by conducting a series of interviews and surveys with project management specialists with practical knowledge of AI and digital technology. The study key outcomes demonstrate core areas where AI has the potential to enhance experts' decisions and to testify the role of digital transformation within the project management domain. The data analysis provides an insight into the perception of AI technology by critically assessing the benefits and impact of digital technology for organisational strategic management. The main objective of this research is to review the literature while examining perceptions of AI among project professionals through interviews and a survey to propose benefits, challenges and opportunities of AI in project management. The research result reflects that AI has a significant advantage in the complicated strategic portfolio management. This study suggests that there is a convincing relationship between the domain applications of AI in project strategic portfolio management. The research result leads to pragmatic recommendations for enhanced project decisions as well as effective and efficient strategic portfolio management for project experts. This study concludes that the project management professionals would be motivated to embrace AI benefits whereas project management organisations are requried to promote and incorporate ways applying the domain applciations of AI in the project management practices.

Keywords: AI, ICTs, Project Management, Digital Transformation, Strategic Decision

Biography:

Dr. Nasrullah Khil has extensive expertise and substantial experience in organisational strategies and systems, project and operations management, knowledge management, management information system, digital technologies and innovation, international business management, team dynamics and leadership, strategic portfolio management in a variety of settings both in UK and from abroad. Dr Khilji is currently working at the School of Computing and Engineering, University of West London as an Associate Professor in Applied Project Management and to lead portfolio of academic partnerships (UK and TNE) and to chair the research group for Information Systems and Knowledge Management.





2 GLOBAL WEBINAR ON

ARTIFICIAL INTELLIGENCE & DATA SCIENCE



Mr. Mohammed Shooqur

National Bank of Kuwait, Kuwait



Generative AI and its challenges in Financial Services Industry (FSI) Abstract:

Introduction of the Gen AI technology has and its adoptions has shown the world it would lead to great transformation in terms of how we will work in future. Since everyone is currently trying to see how it can help their industry, FSI is no behind also. Lot of institutes are deploying internal PoC, some have move passed in journey and had few use cases in productions. But still the adoption rate in FSI across globe is very nascent. Reason for such a low adoption is regulations which govern this industry. There are lot of challenge around there adoptions which organization has to carefully manage before they can go live. Designing proper frame work across all control function is the only way such novel technologies like Generative AI can be use securely and safely so that regulators trust can be built.

Keywords: Generative AI, Financial Industry, Safety

Biography:

Mr. Mohammed Shooqur is a Senior Data Scientist with 12+ years of data science experience and he is working closely on advanced analytics, data science, and managing various BI platforms to help users to generate insights and drive business outcomes. Working In financial industry from his last 6+ years where he build next generation data products using AI & ML mentoring resources for future requirements of this technology.



2 GLOBAL WEBINAR ON

ARTIFICIAL INTELLIGENCE & DATA SCIENCE



Dr. Anna Atefeh Farzindar Loyola Marymount University (LMU), USA

Using Art to Highlight the Challenges and Dangers of Generative Al Abstract:

In recent years, the advancement of generative AI (GenAI) and LLMs has revolutionized various industries by enabling sophisticated natural language processing capabilities and creating a wide variety of data, such as images, videos, audio, text, and 3D. However, it has also introduced significant challenges and dangers related to accuracy, ethical use, and societal impact. For example, hallucination, a phenomenon where models generate false information, can lead to inaccurate facts and loss of user trust. Ensuring the truthfulness of AI outputs is complex, as models trained on vast, imperfect datasets may propagate inaccuracies. Other challenges are related to aligning models with human values and intentions, ensuring they operate in ways that reflect ethical principles and societal norms. Safety issues also pose significant concerns, as there is a need to prevent misuse and unintended harmful consequences of AI technologies. Addressing these biases requires careful dataset curation and ongoing model refinement. Ethical considerations also play a significant role, encompassing transparency, accountability, and the impact of AI decisions on individuals and society. In this talk, I will overview some challenges of GenAl and use my original paintings as prompts to visually demonstrate the problems associated with the current state of AI. Issues such as racism, sexism, and cultural biases present in training data can lead to discriminatory outputs, reinforcing harmful stereotypes. I will provide some suggestions to address these challenges, ensuring the responsible use of AI, including improved data curation, robust model evaluation, transparency in Al operations, continuous monitoring for bias, and the implementation of ethical guidelines and frameworks.

Keywords: Generative AI, LLM, Art, Challenges, Hallucination, Truthfulness

Biography:

Dr. Anna Atefeh Farzindar is a clinical professor at the Computer Science Department, Loyola Marymount University (LMU) in Los Angeles, California. Prior to her current position, she served as a faculty member in the Department of Computer Science at the University of Southern California (USC) for approximately a decade. She earned her Ph.D. in Computer Science from the University of Montreal and her Doctorate in automatic summarization of legal documents from Paris-Sorbonne University in 2005. She made significant contributions to the fields of AI, Natural Language Processing, Social Media Analysis, Interdisciplinary Data Science and Healthcare Predictive Machine Learning. She is the author and co-author of more than five books in the field of AI. She is a painting artist and her paintings have been published in a book titled One Thousand and One Nights.









Dr. Anastasios Liapakis

Computer Technology Institute and Press, Greece



Fostering Digital Skills in Higher Education: The Case of Computing and ELT Students Abstract:

In recent years, the rapid development of personal computers and Information Systems has transformed traditional higher education into a fully or hybrid digital education system (Education 4.0). This modern approach incorporates advanced technology, personalized learning, and critical skills development, preparing students for the digital age. Education 5.0 emphasizes studentcentered processes, fostering creativity, problem-solving, and adaptability. Digital skills, such as Artificial Intelligence, Data Analytics, STEM, Robotics, significantly impact higher education by enhancing intelligent learning environments and adaptive learning systems. However, it's crucial to distinguish between different applications of digital skills, considering ethical and educational implications. For ELT students, digital skills offer unique opportunities to create interactive and engaging classes. Tools like multimedia, gamification, virtual classrooms, and adaptive learning systems enable ELT educators to design dynamic, student-centered lessons, enhancing teaching effectiveness and improving student outcomes. For computing students, digital skills offer unique opportunities to create innovative and impactful projects. Tools like software development environments, collaborative coding platforms, data visualization software, and machine learning frameworks enable computing educators to design hands-on, project-based learning experiences, enhancing teaching effectiveness and improving student outcomes. This paper explores the development and application of digital skills in higher education, focusing on their potential to transform ELT and computing teaching practices.

Keywords: Digital Skiils; AI; Education 4.0

Biography:

Dr. Anastasios M. Liapakis is the head of the School of Informatics at New York College Greece. He is an Adjunct Assistant Professor at the Department of Archival, Library, and Information Systems at the University of West Attica, where he teaches the courses of Databases and Digital Archives & Electronic Governance. Additionally, he serves as the Scientific Responsible of Artificial Intelligence and Big Data Analytics in the field of Education in a major Research Project at the Institute of Computer Technology and Press (CTI) Diophantus. In the past, he has worked as an Adjunct Assistant Professor at the Department of Management Science & Technology, at the University of Peloponnese (for a semester) and as an Adjunct Lecturer for three years at the National and Kapodistrian University of Athens, Department of Digital Industry Technologies, where he taught courses on Object-Oriented Programming, Analysis & Design of Software Systems, and Electronic Governance. He holds a Ph.D. in Computer Science with a specialization in Big Data Analytics from Informatics Laboratory of the Agricultural University of Athens, and a Postdoctoral Diploma from the same University. His doctoral research received a scholarship from the Greek State Scholarships Foundation, gained on of the first positions. His research interests include Data Structures, Big Data Analytics, Knowledge Engineering, Information Systems Management, Machine Learning Techniques, Natural Language Processing, and Sentiment Analysis in problems related to Business Administration, Economics, and Marketing. His notable research work, published in national and international peer-reviewed Journals and Conferences, has got a significant number of citations. One of his research papers published in International Journal of Computational Linguistics (IJLC) was awarded the Best Paper Award of 2021. He supervises four PhD Candidates of the University of Bolton. He has participated in four EU-leading research projects in the area of Informatics. He has been teaching Informatics, Programming, Object- Oriented Programming, Databases, Data Analytics, ICT courses, and Management Information Systems for the past 8 years in public and private universities in Greece.







Dr. Rami Ayoob

Spark Information Technology, Bahrain



The Role of Al in Digital Transformation Abstract:

As digital transformation continues to reshape industries and organizations, artificial intelligence (AI) is playing a key role in driving this change. Al technologies are being increasingly integrated into business processes, enabling automation, improving efficiency, and enhancing decision-making capabilities. This abstract explores the importance of AI in digital transformation, highlighting its impact on various aspects such as customer experience, operational efficiency, and data analytics. The adoption of AI has the potential to revolutionize how companies operate, adapt to changing market trends, and stay competitive in today's rapidly evolving digital landscape. By harnessing the power of AI technologies, organizations can unlock new opportunities for growth, innovation, and sustainable success in the digital age.

Al plays a crucial role in driving digital transformation in various industries by enhancing decision-making, automating processes, and improving customer experiences. Some key roles of Al in digital transformation include:

1.Data analysis: AI algorithms can analyze large amounts of data quickly and accurately, providing insights and trends that can help businesses make informed decisions.

2.Automation: Al-powered systems can automate repetitive tasks and workflows, increasing efficiency and allowing employees to focus on more strategic activities.

3.Personalization: AI technologies can analyze customer behavior and preferences to deliver personalized experiences, recommendations, and interactions.

4.Predictive analytics: AI can use historical data and advanced algorithms to predict future trends, behaviors, and outcomes, helping businesses proactively plan and adapt to changing market conditions.

5.Process optimization: AI can optimize business processes by identifying inefficiencies, suggesting improvements, and streamlining operations for better performance and cost savings.

6.Enhanced customer experiences: Al-driven chatbots, virtual assistants, and personalized recommendations can improve customer satisfaction, engagement, and retention.

7.Risk management: AI can analyze data patterns and detect potential risks or security threats, enabling businesses to mitigate issues before they escalate.

Overall, AI is a powerful tool in driving digital transformation by enabling businesses to adapt to the fast-paced, data-driven, and customer-centric landscape of the digital age. Its ability to analyze data, automate processes, and personalize experiences can help organizations stay competitive, agile, and innovative in an ever-evolving market.







Prof. Massimo Buonomo

International Electrotechnical Commission, Switzerland



Navigating the Intersection of Human Rights and Artificial Intelligence: Ethical and Legal Considerations for Emotion Recognition Systems and Prohibited Practices in the EU Abstract:

In this presentation, we explore the intricate relationship between the Charter of Fundamental Rights of the European Union (CFR) and Artificial Intelligence (AI), with a particular focus on Emotion Recognition Systems (ERS). Prof. Massimo Buonomo will provide a comprehensive analysis of the ethical, legal, and social implications of deploying ERS within the framework of the CFR. This analysis is crucial as AI technologies, especially ERS, become increasingly integrated into various aspects of society, from security and healthcare to marketing and employment. The presentation begins by outlining the key principles and rights enshrined in the CFR that are pertinent to AI development and deployment. These include the right to privacy, the right to data protection, the prohibition of discrimination, and the right to human dignity. Understanding these rights is essential for evaluating how AI technologies align with or potentially violate these fundamental principles. Next, we delve into the specifics of Emotion Recognition Systems. ERS are AI technologies designed to detect and interpret human emotions based on facial expressions, voice intonations, and other physiological signals. While these systems offer promising applications in enhancing user experiences, improving mental health diagnostics, and more, they also raise significant ethical concerns. These concerns revolve around issues such as the accuracy and reliability of ERS, the potential for misuse, and the broader societal implications of emotion surveillance. A significant portion of the presentation is dedicated to discussing prohibited AI practices, with a particular emphasis on social scoring. Social scoring refers to the practice of using AI to assess individuals' behaviors and assign scores that can impact their access to services, employment opportunities, and other societal benefits. This practice is inherently problematic as it can lead to discrimination, infringe on personal freedoms, and perpetuate socio-economic inequalities. We will examine specific cases and regulatory frameworks that address the prohibition of social scoring within the EU context. To ensure a balanced perspective, the presentation will also include recommendations and best practices for the responsible development and deployment of AI technologies. These recommendations will be grounded in the principles of the CFR, aiming to safeguard human rights while fostering innovation. Key recommendations include implementing robust data protection measures, ensuring transparency and accountability in AI systems, and promoting inclusive and diverse AI development teams. Overall, this session aims to foster a nuanced understanding of the balance between technological advancement and the protection of fundamental human rights. It will provide valuable insights for policymakers, AI developers, legal professionals, and other stakeholders involved in the AI ecosystem, guiding them towards responsible and ethical AI practices that respect and uphold the fundamental rights of individuals in the European Union.

Conclusion:

The session concludes by reiterating the critical need to ensure that AI technologies, including ERS, are developed and deployed in a manner that respects and upholds the fundamental rights enshrined in the CFR. By understanding the ethical, legal, and social implications of AI, stakeholders can work towards a future where technological innovation and human rights coexist harmoniously.







Mr. Kevin Pyles FamilySearch, USA



Title: The Al You See May Be the Al That Deceives You

Abstract:

We have been told for years, warned even, to be careful with AI and what it can do to us. Yet, we keep pushing forward, testing out new models and algorithms. We applaud the incredible feats of achievement, and although we know they could be used for evil, we can't get enough. More likes, comments and subscribers are taking place with each new company that comes along with a better GenAI model. And just when we think we are seeing the changes, that is when the AI deceives us into believing what we are seeing and what we are hearing. The problem is just when we think we understand it, this is when the AI proves it has control of our thoughts, actions and beliefs. Join Kevin as he demonstrates the deceptive and awesome power of AI sitting at our fingertips, and provides the rails we may not want, but that we need to prevent AI from controlling our very societies.

Biography:

Kevin Pyles has been in the QA industry now for over 15 years with project, product, and management roles throughout. Kevin held the position of Head of Product at test.ai where he was responsible for product vision, strategy, design and implementation. Kevin also served on the board for QA at the Point (a local testing meetup), and is an award-winning international speaker. Kevin believes AI and Python are the future of testing. Kevin has recently spent too much time golfing and doesn't appear to be getting any better no matter how much he plays. He loves spending time with his wife and 6 kids

ranging in ages from 8-20. He loves food especially pepperoni pizza, and can't get enough ice cream.



2^{md} GLOBAL WEBINAR ON

ARTIFICIAL INTELLIGENCE & DATA SCIENCE



Miss. Sumayya Samreen Royal Holloway University of London, UK



Title: The Role of AI in Revolutionizing Health Care

Abstract:

Real estate is a vast field, it deals with lands and properties, especially houses that can contain several types, like villas, flats, apartments, bungalows, mansions, etc. People around the world buy properties and houses as a form of investment in real estate. Housing prices keep fluctuating over time. They are never consistent. It can increase or decrease overtime due to population change, weather conditions, for example, if there was a floor or draught in an area, the house prices can come rushing down, or if there is a mall or a famous tower built near the property or house, the prices of the whole area increase. Therefore, it depends on the situation of the surroundings. Keeping track of the fluctuations is mandatory from time to time. If we are not aware of the market and if the market (property prices) is good to buy or sell at a particular time, one could face a big loss. One should not be ignorant and keep knowledge of the market. That is why house price prediction is necessary, to know if in the future, the prices will increase or decrease, and if one should wait before investing in or selling a house. This process is done by collecting past data and using various statistical techniques like regression. In this project, we are going to use linear regression and ridge regression, to predict housing prices. It is known to be the best form of regressions for determining housing prices. We will also work with online machine learning to know how the prediction would work with real time data. This project concentrates on three different datasets and compares the results with each other.

Keywords: Housing prices, Linear regression, Ridge regression, Online Machine Learning, Prediction, Statistical

techniques, Market fluctuations

Biography:

A graduate with a Master's in Artificial Intelligence from Royal Holloway and a Bachelor's in Computer Engineering from Presidency University, possessing strong skills in AI, machine learning, and data analysis. Experience includes internships at Supram Industries and BrainTower, focusing on customer sentiment analysis, web scraping, and data pre-processing. Key academic projects involved housing price prediction, face recognition for cybersecurity, and Twitter sentiment analysis. Certified in various data science and AI courses. Demonstrated leadership as a coordinator and social media manager for the Speakers and Anchors Club, and as secretary of the Rotaract Club. Recognized for excellent leadership in Rotaract projects.







Dr. Rastafa I. Geddes Geddes Neural Network (GNN), USA



Title: The marriage of AgTech, AGI, and Robotics: Revolutionizing Sustainable Farming Practices

Abstract:

Dr. RAS of Geddes Neural Network (GNN) will host this exciting webinar exploring the convergence of Agricultural Technology (AgTech), Artificial General Intelligence (AGI), and Robotics, and their transformative potential for sustainable farming. Panelist TBA, representing GrowSmart Innovators https://growsmartinnovators.com/our-mission/, will discuss how AgTech is utilized in Farm to School programs, showcasing how their (to be announced) product is making a difference. Robert Carlsson, CEO of GreenCityFarming https://www.greencityfarming.com/, will delve into the application of AGI in optimizing resource use and crop yields within agricultural operations. Finally, Karen Kilroy, founder of File.baby https://file.baby/, will share her insights on the latest advancements in farming robotics and their role in precision agriculture and labor efficiency. The webinar will conclude by examining the challenges and ethical considerations of implementing these technologies, emphasizing the importance of responsible development for a sustainable future of agriculture.

Biography:

Dr. Rastafa I. Geddes is a distinguished figure at the intersection of neuroscience and artificial intelligence (AI). With a background in neuroscience, Dr. Geddes deeply understands cognitive processes, which he seamlessly integrates into his work in AI. Under the mentorship of Peter Skuta, a renowned industry Machine Learning (ML)/Large Language Model (LLM) expert, Dr. Geddes is honing his skills in AI development by understanding and researching Computational Cognitive Developmental Neuropyschology. His research focuses on elucidating the parallels between biological neural networks and AI systems, with a keen interest in simulating human-like cognition by teaching AI. Dr. Geddes is committed to pushing the boundaries of AI research, striving to bridge the gap between neuroscience and artificial intelligence







Mr. Sameer Ranjan

Catenate, USA



Title: Al in Healthcare for modern medicine predictions

Abstract:

The integration of Artificial Intelligence (AI) into healthcare marks a transformative era in modern medicine, offering unprecedented capabilities in predicting and managing health outcomes. AI technologies, including machine learning algorithms, natural language processing, and deep learning, are increasingly utilized to analyze vast datasets, identify patterns, and generate predictive models that enhance diagnostic accuracy, treatment plans, and patient care. These advancements enable personalized medicine by predicting individual responses to treatments, forecasting disease progression, and identifying potential health risks before they manifest. Additionally, AI-driven predictive analytics support healthcare professionals in decision-making processes, streamline clinical workflows and reduce operational costs. Despite the promise, challenges such as data privacy, ethical considerations, and the need for regulatory frameworks persist. Nonetheless, the ongoing evolution of AI in healthcare continues to propel the industry toward more precise, efficient, and patient-centric care, ultimately improving health outcomes and advancing the frontier of modern medicine.

Biography:

Mr. Sameer is a product innovator, thought leader, speaker, entrepreneur, board member, and investor. He has created data and AI-led products for various industries. He serves as Chief Technology Officer and Director (Data Science) at Catenate Corp (Creator of MayaMaya and MiraMira), and founder of Cognitive Sprints. He is also the Board Chairman of S3 Private Limited (creator of lemmebuy and Vner). He holds a master's degree in Data Science from UT Dallas. He has patents on AI algorithms, is an avid speaker on multiple platforms, and has been featured as a guest technical expert writer in magazines—also a thought leader at 3AI and CDAO circle.







Prof. Eric Atwell University of Leeds, UK



Title: EduBots: Chatbots for University Education

Biography:

Prof. Eric Atwell has led the Al4L research group for Artificial Intelligence and Language Models for university teaching and assessment, and for learning about the Quran and Hadith; He teached Artificial Intelligence and text analytics to 400+ students in undergrad and postgrad classes. His Specialties are Artificial Intelligence, Text Analytics, Data Mining, Machine Learning, Corpus Linguistics & Natural Language Processing.``



2nd Global Webinar Artificial Intelligence & Data Science

