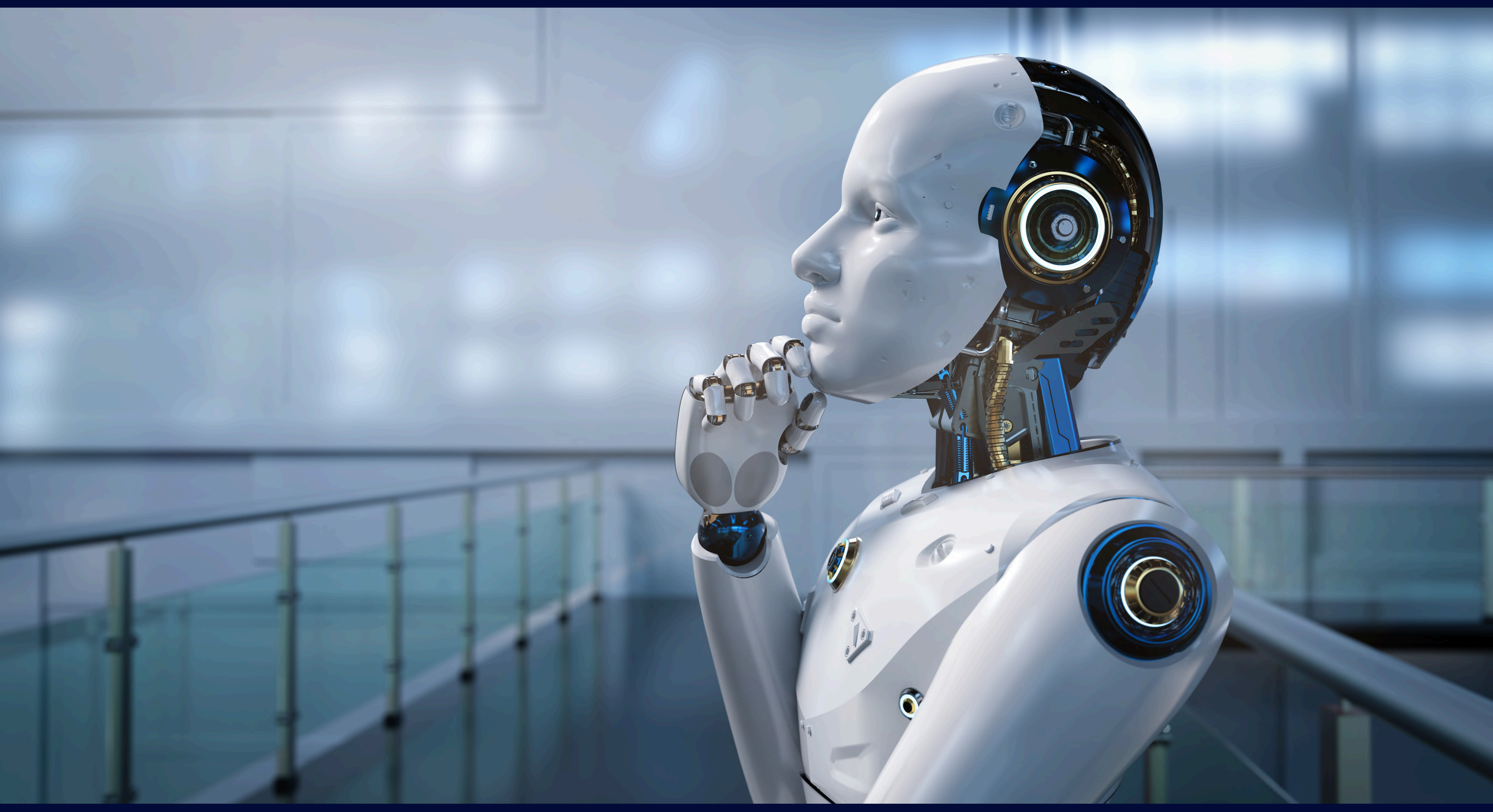
HK CONFERENCES


# GLOBAL WEBINAR ON

# ARTIFICIAL INTELLIGENCE & DATA SCIENCE

# APRIL 15-16, 2024



# WEBINAR | ZOOM MEETINGS

# LETTER FROM THE CHAIRMAN

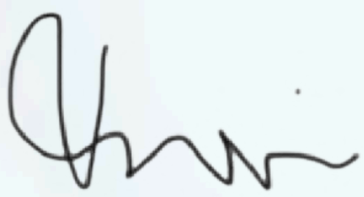
Dear Speakers & Delegates,

Greetings from HK CONFERENCES

It is with great pleasure to welcome you all to our "Global Webinar on Artificial Intelligence & Data Science" which is going to be held on April 15-16, 2024 in Zoom Meetings.

I'm Dana York and I'm honored to be the chair for Global Webinar on Artificial Intelligence & Data Science. The conference will cover various topics i.e., Artificial Intelligence, Machine Learning, Data Science & Robotics.

You are cordially invited to share your experience, knowledge and opinions with your professional colleagues by presenting a paper at the Upcoming Webinar. Finally, I would like to thank Kiran Kumar Jwala of the HK Conferences and the Conference Organizer Kavya for their efforts and contribution to make this happen.



**Sincerely**
**PROF. DANA YORK**
**THE CHAIR OF THE CONFERENCE | ARTIFICIAL INTELLIGENCE & DATA SCIENCE**
**EUROPEAN MEDICAL LASER ASSOCIATION, USA**

**"COMING TOGETHER IS A BEGINNING. WORKING TOGETHER IS SUCCESS..."**

# SCIENTIFIC PROGRAM

GLOBAL WEBINAR ON

## ARTIFICIAL INTELLIGENCE & DATA SCIENCE

**WEBINAR**
**UK TIME ZONE**

## Day-1 (April 15, 2024)

**08:45-09:00** Welcome Speech & Opening Ceremony

## Plenary Forum

### 09:00-09:40

**Title: The Matrix's risk, how to find the new Neo**

Prof. Francesco Iarlori, Digital Transformation Strategist, Italy

### 09:40-10:20

**Title: Review of Artificial Intelligence in Medicine**

Prof. Dana York, European Medical Laser Association, USA

## Keynote Forum

### 10:20-10:55

**Title: Navigating the Future of Learning: Large Language Models and Their Impact on Educational Transformation**

Mr. Oluwole Fagbohun, Change Block Holdings Limited, UK

### 10:55-11:30

**Title: Predicting Health: Leveraging AI for Risk Stratification and Personalized Care**

Miss. MaryRose Cleere, AI Specialist, Ireland

## Oral Forum

### 11:30-12:00

**Title: Calculating Oil in Place using Laplacian Approximations**

Mr. Chad Watson, SAS Evolutions, Portugal

## 12:00-12:30

**Title: Developing an Expert System for Early Diagnosis and Management of Stroke**

Mrs. Agenmonmen Tejiri, Graduate MSc. MIST Coventry University, UK

---

## 12:30-13:00

**Title: A Dataset of Microscopic Images of Sickle Cells**

Prof. Florence Tushabe, Soroti University, Uganda

---

## 13:00-13:30

**Title: Manufacturing Chemical Additive Optimization**

Mr. Josh Galloway, Schneider Electric, USA

# Panel Discussion

## 13:30-14:30

**Title: Charting New Frontiers: Navigating the Landscape of Artificial Intelligence Perspectives, Innovations, and Ethical Considerations**





**Dr. Tony De Bree | Dr. Juergen Weichenberger | Prof. Dana York | Prof. Francesco Iarlori | Dr. Jagjit Singh Dhaliwal**

**Dr. Tony De Bree,** Tony de Bree Consulting, Training & Coaching, Netherlands
**Dr. Juergen Weichenberger,** Schneider Electric, UK
**Prof. Dana York,** European Medical Laser Association, USA
**Prof. Francesco Iarlori,** Digital Transformation Strategist, Italy
**Dr. Jagjit Singh Dhaliwal,** Universiti Brunei Darussalam, Brunei

# Plenary Forum

## 14:30-15:10

**Title: Industrial Applications leveraging Generative AI and its challenges**

Dr. Juergen Weichenberger, Schneider Electric, UK

## 15:10-15:40

**Title: An Artificial Intelligence based Tool for Digital Pathology and Therapy Recommendations**

Prof. Saeed Amal, Northeastern University, USA

# Keynote Forum

## 15:40-16:10

**Title: Simulacra and Historical Fidelity: Reconstituting Lost Cultural Heritage in the Digital Age**

Prof. James Hutson, Lindenwood University, USA

## 16:10-16:40

**Title: Geeks with Empathy: Human Factors in AI Delivery Models**

Mr. Jeremy Adamson, University of New Brunswick, Canada

# Workshop & Presentation by Dr. RAS Geddes & Team | 16:40-18:00

## Title: Cognitive Sentients and the AI CHILD: How Close are we to Artificial Consciousness?

**Miss. Tera Lisicky | Dr. Rastafa I. Geddes | Mr. Peter Skuta**

**Dr. Rastafa I. Geddes, Geddes Neural Network (GNN), USA**
**Mr. Peter Skuta, AI CHILD Owner, Slovakia**
**Miss. Tera Lisicky, Bringin' it Backwards LLC, USA**

# End of Day 1

# SCIENTIFIC PROGRAM

## GLOBAL WEBINAR ON
## ARTIFICIAL INTELLIGENCE & DATA SCIENCE

**WEBINAR**
**UK TIME ZONE**

## Day-2 (April 16, 2024)

## Plenary Forum

### 09:00-09:40

**Title: AI Act and Human Rights in AI: A Model for Global Legislation**

Prof. Massimo Buonomo, International Electrotechnical Commission, Switzerland

### 09:40-10:20

**Title: Right-skilling For The AI-Powered Economy**

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

## Keynote Forum

### 10:20-10:50

**Title: Harmonizing Technology and Humanity: Global Ethical Standards for AI**

Dr. Rosario Moscato, Live Tech/APRA, Italy

### 10:50-11:20

**Title: The Role of AI in Digital Transformation**

Dr. Rami Ayoob, Spark Information Technology, Bahrain

## Oral Forum

### 11:20-11:50

**Title: AI and Critical Deepfake: Lessons from Electoral Processes**

Miss. Maya Sherman, American India Foundation, India

## 11:50-12:20

**Title: Critical Evaluation of the Future Role of Artificial Intelligence in Business and Society**

Mr. Moshood Yahaya, University of Bradford, UK

## 12:20-12:50

**Title: AI in radiation therapy optimization: FOTELP-VOX program enhancement**

Dr. Milena Zivkovic, University of Kragujevac, Serbia

## 12:50-13:20

**Title: Applications and perspectives of AI in Customer Relationship Management**

Mr. Max Mozgovoy, SegmentValue, Netherlands

## 13:20-13:50

**Title: Digital Data Twin for Human Skill Transformation**

Mr. Sameer Ranjan, Catenate Corp, USA

## 13:50-14:20

**Title: Beyond Algorithms: How Autonomous Agents Predict and Adapt to Consumer Behavior**

Mr. Martez Knox, BakedBot AI, USA

# Panel Discussion

## 14:20-15:00

**Title: "Discussion on Translating AI to the Hospitals"**

**Prof. Saeed Amal | Prof. Dana York | Mr. Chad Watson | Miss. MaryRose Cleere**

Prof. Saeed Amal, Northeastern University, USA

Prof. Dana York, European Medical Laser Association, USA

Mr. Chad Watson, SAS Evolutions, Portugal

Miss. MaryRose Cleere, AI Specialist, Ireland

## Keynote Forum

### 15:00-15:30

**Title: Toward System model Safety Requirement Proving using Artificial Intelligence**

Prof. Leila Ben Ayed, National School of Computer Sciences ENSI, Tunisia

### 15:30-16:00

**Title: SymbIAG: Collaboration and Lifecycle at the core of AI Governance**

Dr. David Roldán Martínez, Universidad Politécnica de Valencia, Spain

## Oral Forum

### 16:00-16:30

**Title: Machine Learning for Managers**

Miss. Aishwarya Rai, Sofy.AI, USA

### 16:30-17:00

**Title: Revolutionizing Autism Education: Integrating AI, Deepfake, and Augmented Reality for Personalized Learning Environments**

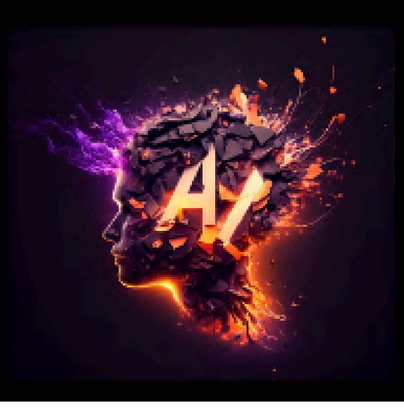
Dr. Dmitrii Shapievskii, ROYGBIV Projects, Germany

### 17:00-17:30

**Title: The Role AI in the Future of Work & Jobs**

Mr. Tosin Shobukola, ApreeCourt Limited, UK

## End of Day 2




ARTIFICIAL INTELLIGENCE
DATA SCIENCE

APRIL 15-16, 2024
WEBINAR

HK CONFERENCES

GLOBAL WEBINAR ON

# ARTIFICIAL INTELLIGENCE & DATA SCIENCE

APRIL 15-16, 2024 | WEBINAR


## Dr. Juergen Weichenberger

*Schneider Electric, United Kingdom*


## Industrial Applications leveraging Generative AI and its challenges


With the introduction of Generative AI at the mainstage of the Artificial Intelligence world, we got immediately tasked with the challenge to find out on how to use it in a meaningful and value generating way.

One of the first projects, which we have started, is around the use of Generative AI in generating PLC code but not only the code but also create documentation for the generated code or even existing code. Some of the main challenges are the consistence in generating code towards standards and as well on how to respect naming conventions within an individual application.
All of this led to a novel application leveraging Generative AI to create and document PLC code.



Keywords: Generative AI, Code Generation & Documentation, PLC


### 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. Josh Galloway**
*Schneider Electric, USA*

## Manufacturing Chemical Additive Optimization

Many manufacturing operations rely on various chemical additives to increase the efficiency and performance of a chemical manufacturing process. These additives are usually quite costly, and optimization of their dosing can result in significant savings for the operation. Working with data obtained from the SCADA and laboratory of an RO desalination plant, an ensembled approach utilizing a predictive model and an operational window model was used to provide a dosage recommendation for the two main pretreatment additives. The predictive model utilizes a deep temporal convolutional neural network (DTCN) based on the wavenet structure with the process KPI as targets, additives as decision variables, and other pertinent plant variables as inputs. A derivative-free optimization method is then used on the DTCN to produce an additive dosage recommendation subject to KPI and operational constraints. The operational window model employs a Bayesian Gaussian mixture model (BGMM) to mine the plants various operational modes and then descriptive statistics provide an additive recommendation based on a tunable lower quantile historic performance. The DCTN utilizes less reliable but high-frequency process analyzer instrumentation, and the BGMM utilizes highly reliable but infrequently-sampled laboratory measurements. The models are then ensembled via an affine sum to allow for robustness of prediction and to increase operations confidence in the recommendation. The DTCN was shown to have an R2 score of 0.921 on the test data set, and the BGMM was shown to have a silhouette score of 0.9165 with 7 clusters identified. The resulting ensembled chemical additive recommendation shows a potential 5-7% reduction in both chemical's dosages compared to the test set's actual dosages.

**Keywords**: Desalination, Manufacturing, Deep temporal convolutional neural network, Bayesian gaussian mixture model, Optimization

### Biography

**Mr. Josh Galloway** is a AI consultant with a previous background in process engineering and advanced process control including in-plant, corporate operations-excellence and consulting experience. Following completion of a masters in applied mathematics focusing on data science, ML and numerical analysis switching to data scientist and AI roles totaling approximately 15 years of industry experience in various manufacturing industries.

GLOBAL WEBINAR ON

# ARTIFICIAL INTELLIGENCE & DATA SCIENCE

APRIL 15-16, 2024 | WEBINAR

**Prof. James Hutson**

*Lindenwood University, USA*

## Simulacra and Historical Fidelity: Reconstituting Lost Cultural Heritage in the Digital Age

In the realm of art history, the application of artificial intelligence (AI) has become a pivotal tool for reconstructing cultural heritage, particularly for artworks from eras such as the 1785 Salon. Leveraging the concept of the 'Period Eye,' this approach emphasizes the importance of understanding artworks within their original contexts, combining diligent historical research with generative AI to recreate lost or deteriorated art pieces. Through the use of advanced digital technologies, including Quixel Megascans for material replication and AI for image generation, this methodology aims to offer immersive experiences that faithfully represent the material and textural realities of historical periods. Such digital reconstructions allow contemporary audiences to experience artworks as they were initially perceived, bridging the gap between past and present. Despite skepticism from traditional sectors, this AI-driven approach, supported by comprehensive datasets and empirical research, provides reconstructions with unprecedented historical accuracy and contextual richness. This fusion of technology and historical insight represents a significant step forward in preserving and appreciating our cultural heritage through a modern lens.

Keywords: Artificial Intelligence, Cultural Heritage Reconstruction, Period Materialities, Digital Technologies, Historical Accuracy, Immersive Virtual Reality

### Biography

Prof. James Hutson holds the esteemed position of Lead XR Disruptor and Department Head of Art History and Visual Culture at Lindenwood University. His remarkable contributions include founding the Immersive Arts and Culture Hub and the XR and Gaming Lab, pivotal in fostering immersive experiences for all students, enhancing equitable education. He spearheads the AI initiative and AI Ambassadors, focusing on integrating AI across majors, preparing students for technological disruptions in education and everyday life. Dr. Hutson leads an international research team pioneering collaborative authorship models to tackle complex problems. As editor-in-chief of the International Journal of Emerging and Disruptive Innovation in Education (iJEDIE), he enriches interdisciplinary discourse. His extensive experience includes teaching over 120 online courses, developing award-winning online degree programs, and authoring over 100 academic works.

**Miss. MaryRose Cleere**
*AI, Waterford, Dublin, Ireland*

## Predicting Health: Leveraging AI for Risk Stratification and Personalized Care

This paper explores the integration of artificial intelligence (AI) in healthcare for predicting patient risks and health outcomes, presenting a framework that utilizes two key components: 1. Historical Data Analysis: AI algorithms analyze vast amounts of historical patient data, including medical records; demographics; clinical trials, to identify patterns and correlations associated with specific conditions and their progressions. 2. Real-Time Patient Monitoring: Utilizing wearable technology and other sensors, the framework collects real-time physiological data. This data is continuously analyzed by the AI to detect subtle changes; indicating potential health deterioration or risk factors. By combining insights from historical analysis with real-time monitoring, the AI system dynamically predicts individual patient risks and potential health outcomes. This information empowers healthcare professionals to: a) Stratify patients: Identify individuals at high risk for specific conditions, allowing for early intervention and preventive measures. b) Personalize care: Tailor treatment plans based on individual risk profiles and real-time data, leading to more effective; targeted interventions. c) Optimize resource allocation: Focus resources towards patients at highest risk, improving overall healthcare efficiency. The paper concludes by discussing ethical considerations and limitations associated with AI integration in healthcare, emphasizing the importance of responsible development and human-centered implementation for maximizing patient benefit.

Keywords: AI patterns, Algorithms, Real-time

### Biography

Miss. MaryRose Cleere has 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. Here are some highlights Big Data & Knowledge Management Expertise 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: Previously, she held leadership positions at the OECD (Strategy Executive) and the International Energy Agency, where she spearheaded strategic initiatives, managed international partnerships, and represented these organizations at global conferences. She has fluency in multiple languages (French, Russian) and understanding of geopolitics further strengthens her ability to navigate the complexities of the global landscape. Academic Credentials. Her academic background reflects her broad interests and thirst for knowledge. 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. This conference provides an exciting opportunity to connect with other AI enthusiasts and explore the potential of this transformative technology to create a better future.

GLOBAL WEBINAR ON

# ARTIFICIAL INTELLIGENCE & DATA SCIENCE

## APRIL 15-16, 2024 | WEBINAR

**Mr. Oluwole Fagbohun**
*Change Block Holdings Limited, UK*

### Navigating the Future of Learning: Large Language Models and Their Impact on Educational Transformation

Large Language Models (LLMs) such as GPT-4, BARD, Mistral, and Claude have significantly impacted the field of education by providing contextually relevant material with unprecedented skill and comprehension of human language. This article explores the applications of LLMs in education, including automatic question-answering generation, interactive tutoring, automated grading, and personalized learning. The paper also addresses the ethical, privacy, and equity concerns that arise when integrating LLMs into education. The research provides insights, recommendations, and a thorough understanding of how LLMs can be utilized to promote inclusive and ethically sound educational innovation. This study holds great value for educational policymakers who strive to both encourage innovation and maintain ethical standards. Through providing informed recommendations and a clear understanding of how Large Models (LMs) can be used to promote inclusive and ethically responsible educational development, it makes a substantial contribution to the academic discourse on educational change. It also highlights the diverse array of opportunities presented by LMs in the context of educational transformation.

Keywords: Large Language Models (LLMs), Interactive Tutoring, Prompt design, ChatGPT, Automated Evaluation, Personalized Learning, Educational Content, Artificial Intelligence, Attention based architecture.

### Biography

Mr. Oluwole Fagbohun currently serves as the VP of Data Science at ChangeBlock, where he spearheads efforts to address climate change using AI. Alongside, he is the founder of Readrly, an EdTech company that employs Generative AI and gamification to improve children's reading abilities. He is also the author of the book 'TensorFlow Developer Certificate Guide.

**Mr. Chad Watson**
*SAS Evolutions, Portugal*

## Calculating Oil in Place using Laplacian Approximations

Monte Carlo simulations have been used in Reservoir Calculations for almost twenty years. Hence a Bayesian statistician can be valuable asset to any exploration company or SME in the energy sector. One task for any petroleum engineer or manager is to quantify the uncertainty in calculating the oil in place for any reservoir. It can be very expensive to purchase CMG or Eclipse to perform these approximations. This poses challenges to SMEs in the energy sector. Additionally, when the software packages unique to the petroleum sector is not always readily available and time is of great importance an alternative approach should be sought. This presentation highlights the suitability of the Laplacian Approximation approach and a comparative analysis of using Monte Carlo simulations which is currently used in the petroleum sector which is an alternative to lengthy Monte Carlo simulations.

Keywords: Petroleum Risk, MCMC Algorithms, Laplacian Approximation, Reservoir Calculations, Oil in Place

### Biography

Mr. Chad Watson is a experienced Data Scientist and Bayesian Statistician with over 15 years of experience working on projects in Finance, Risk and Medical Statistics. Strong quantitative background with expertise in Statistical and Data Modeling, as well as Machine Learning.

GLOBAL WEBINAR ON

# ARTIFICIAL INTELLIGENCE & DATA SCIENCE

APRIL 15-16, 2024 | WEBINAR

**Mrs. Agenmonmen Tejiri**

*Graduate MSc. MIST Coventry University, UK*

## Developing an Expert System for Early Diagnosis and Management of Stroke.

A stroke is a medical emergency that needs prompt attention because it stops the supply of blood to the brain. The strategy or method used to diagnose the disease will determine how early the disease can be accurately detected. To address the difficulties specific to the disease, a suitable technology that can reliably identify stroke becomes an attractive alternative. An expert artificial intelligence (AI) system for early diagnosis and management of stroke is proposed to ameliorate the challenges because it is an intelligent information processing system that can aid stroke experts and clinicians in Nigeria in managing the uncertainties associated with stroke and aid diagnosis.This project work designed and implemented a web-based expert AI system for early diagnosis and management of stroke that uses the human-like reasoning style for diagnoses and suggest possible management steps for stroke through interactivity with the user. With the aim of developing an expert AI system, clinicians in Nigeria can potentially access a web-based system to assist in accurately predicting and differentiating between the different types of strokes. It employs programs like Structured Query Language (MySQL), Hypertext Preprocessor (PHP), JAVA, Hypertext Markup Language (HTML), Extensible Markup Language (XML), and Cascading Style Sheets (CSS) while a web-based domain was used to host the application for easy accessibility. The system proved to be of enormous advantage in diagnosing stroke, as it diagnoses and learns about each user per time, to provide adequate and appropriate results and makes reliable predictions to users. After a diagnosis has been made, the system generates the results immediately on the system, and a copy is sent to the users, at the email address provided.

**Keywords**: Stroke Diagnosis, Expert Artificial Intelligence, Web-Based Healthcare System, Early Disease Detection, Medical Emergency Management, Intelligent Information Processing.

### Biography

**Mrs. Agenmonmen Tejiri** was borned in Nigeria. In 2006, she earned a BSc in computer science from Benson Idahosa University, where she finished her undergraduate studies. With a strong desire to advance in the field of computing, she completed her National Youth Service Corps (NYSC) service in March 2007 and concluded her term in February 2008. In 2019, she enrolled in Benson Idahosa University's MSc in Computer Science programme. She obtained a distinction in her MSc in Management of Information Systems and Technology from Coventry University in 2023, further honing her skills in Management utilising Information Technology (IT). Her academic pursuits provided her with a solid knowledge base that would become the basis of her professional life. With more than ten years of experience, She worked in the telecommunications and education industries for both the public and commercial sectors, where cooperation with stakeholders at all levels is the norm. She currently resides in Coventry, United Kingdom, and her top goals include researching artificial intelligence solutions and managing information technology through the use of digital transformation techniques and data analytics skills.

GLOBAL WEBINAR ON

# ARTIFICIAL INTELLIGENCE & DATA SCIENCE

APRIL 15-16, 2024 | WEBINAR

**Prof. Florence Tushabe**

*Soroti University, Uganda*

## A dataset of Microscopic Images of sickle cells

The World Health Organization (WHO) estimates that about 5% of the world's population carries genes responsible for sickle cell trait and each year about 300 000 infants are born with sickle cell disease (SCD). SCD is a lifelong condition where sickled red blood cells block perfusion, leading to several complications such as anaemia, pain, swelling, organ damage, blindness, stroke and premature death. Artificial intelligence techniques could lead to more insights to understanding SCD including improved testing and treatment options. This necessitates the use of as much data about SCD as possible, including image data. However, there are few available image datasets that depict microscopic images of sickled and normal red blood cells. There are even fewer datasets whose images were captured using non-professional cameras like those in mobile phones. In this work, we present a 259-image dataset of sickled and normal red blood cells, well-labelled and publicly available freely. The images were captured using mobile phone cameras which are widely used even in resource constrained places in Africa and South America. The blood samples were collected from hospitals in Soroti and Kumi districts in Uganda, analysed from Soroti University-Biochemistry DepartmentLaboratory and labelled accordingly. This dataset is useful for mobile applications that apply computer vision, deep learning, data science, artificial intelligence or machine learning techniques for medical diagnosis, health research, pharmaceutics and blood banks.

**Keywords**: Red blood cells, Sickle cell disease, Anemia, Database, Microscopic images

### Biography

**Prof. Florence Tushabe** is an Associate Professor at Soroti University and a distinguished researcher who has passionate about AI (Artificial Intelligence). She has developed intelligent systems for object recognition in images and is passionate about Artificial Intelligence. She was first exposed to AI in 2008 while studying her PhD at the University of Groningen and fell in love with it. She first used AI techniques for traffic sign detection and has since progressed to develop AI components for skin disease diagnosis and speech-to-text recognition. She is currently using AI to detect sickle cells.

**Dr. David Roldán Martínez**
*Universidad Politécnica de Valencia, Spain*

## SymbIAG: Collaboration and Lifecycle at the core of AI Governance

The paper addresses the early-stage industrialization of AI, focusing on AI Services Lifecycle Management. It introduces operationalization and industrialization concepts, emphasizing reusability, scalability, and safety for accelerated AI adoption. The study proposes a taxonomy for classifying AI services, particularly in the context of AI as a Service (AIaaS). The API economy and API Lifecycle Management are discussed, stressing the importance of well-planned governance. Collaboration Engineering is introduced to distinguish communication, coordination, and cooperation in collaborative efforts. The SYMBIAG framework is presented as a model for AI Services Industrialization, incorporating Collaborative AI Service Lifecycle Management. The framework, organized in layers and stages, aims to provide a methodological approach for identifying and implementing AI Services business cases. The paper concludes by summarizing key findings, acknowledging limitations, and suggesting future research directions, including the need for further validation of the proposed framework and a more in-depth analysis of AI's impact on each stage of the AI Service Lifecycle.

Keywords: AI, AI Service, AI Economy, AI Services Lifecycle Management, AI Service Governance

### Biography

Dr. David Roldán Martínez has 20 years of experience in software systems architecture. Holding a PhD in Telecommunications Engineering, he has 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 has a prolific scientific-technical popularizer with over twenty books, and he has a keen interest in personal development and coaching.

GLOBAL WEBINAR ON

# ARTIFICIAL INTELLIGENCE & DATA SCIENCE

APRIL 15-16, 2024 | WEBINAR

## Prof. Francesco Iarlori

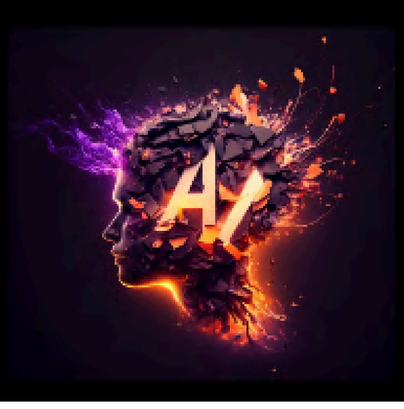
*Digital Transformation Strategist, Italy*

### The Matrix's risk, how to find the new Neo

Artificial Intelligence has rapidly advanced, bringing about transformative changes across various domains. However, this technological progress is accompanied by a set of major issues that demand attention. One paramount concern is the ethical implications surrounding AI applications. As AI systems become increasingly autonomous, questions arise about accountability, transparency, and the ethical choices embedded in their decision-making processes. Also, bias in algorithms if not properly addressed, can perpetuate, and even exacerbate societal biases present in training data. This bias can lead to discriminatory outcomes in areas such as hiring, lending, and criminal justice, raising concerns about fairness and justice in AI systems. The vast amounts of data required to train AI models, often personal and sensitive, raise concerns about how this information is collected, stored, and utilized (data privacy). The Matrix [Lana and Lilly Wachowski - 1999] released one year before the millennial is a science fiction film that explores a dystopian future where intelligent machines have enslaved humanity by creating a simulated reality, known as the Matrix, while using human bodies as an energy source. Even if we are a bit far from this scenario, the movie raises several thematic and philosophical considera3ons: Artificial Intelligence Dominance: The narrative depicts a scenario where AI achieves dominance over humanity, leading to a dystopian world. This theme prompts reflections on the potential consequences of unchecked AI development and its implications for society. Simulation and Reality: The concept of a simulated reality, where humans are unaware that their perceived world is not real, prompts contemplation on the nature of reality and the challenges of distinguishing between what is artificial and what is genuine. This philosophical aspect reflects concerns about the impact of advanced AI on our perception of reality. Human-Machine Interface: The film explores the interface between humans and machines, portraying a direct connection between the human brain and computer systems. This concept raises questions about the potential integration of AI with the human mind and the ethical considerations surrounding such advancements. Existential Threat: "The Matrix" suggests an existential threat posed by AI, portraying a world where humanity is at the mercy of machines. This theme aligns with broader concerns in real-world discussions about the potential risks associated with super intelligent AI and the importance of addressing these risks proactively. The storyline delves into ethical dilemmas surrounding the use of AI, particularly when, from pure suggestion, it comes to the manipulation and control of human lives. This prompts discussions about responsible AI development and the need for ethical guide(lines) in creating intelligent systems.

### Biography

Prof. Francesco Iarlori 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.




ARTIFICIAL INTELLIGENCE
DATA SCIENCE

APRIL 15-16, 2024
WEBINAR

CONFERENCES

GLOBAL WEBINAR ON

# ARTIFICIAL INTELLIGENCE & DATA SCIENCE

APRIL 15-16, 2024 | WEBINAR


## Mr. Jeremy Adamson

*University of New Brunswick, Canada*


## Geeks with Empathy: Human Factors in AI Delivery Models

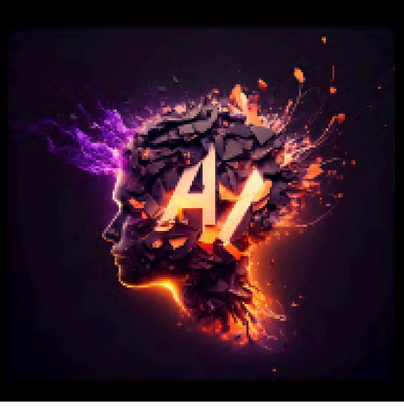

Despite widespread enthusiasm for generative AI, realizing measurable benefits remains a challenge for many organizations. This presentation underscores the critical need for an intentional focus on human factors and alignment with overarching corporate goals to sustain sponsor interest. By dispelling the hype surrounding AI, the discussion provides participants with a guide to crafting a pragmatic playbook based on realistic and achievable goals. Emphasizing a value-oriented approach to AI project planning and execution, the presentation delves into ethics and regulatory compliance. Attendees will gain insights into orienting AI towards organizational goals, understanding the dangers of depersonalization, and building a balanced portfolio. This holistic approach empowers participants to foster responsible innovation, ensuring tangible benefits for stakeholders and society.



Keywords: Leadership, Management, Strategy, Change, Delivery


### Biography

Mr. Jeremy Adamson is a leader in AI and analytics strategy, and has a broad range of experience in aviation, energy, financial services, retail, and public administration. Jeremy has worked with several major organizations to help them establish a leadership position in analytics and to unlock real business value using AI.Jeremy is the Vice President of Business Intelligence at Steele Auto Group, an instructor in corporate strategy at the University of New Brunswick, and the author of Minding the Machines and Geeks with Empathy.




ARTIFICIAL INTELLIGENCE
DATA SCIENCE

APRIL 15-16, 2024
WEBINAR

HK CONFERENCES

GLOBAL WEBINAR ON

# ARTIFICIAL INTELLIGENCE & DATA SCIENCE

APRIL 15-16, 2024 | WEBINAR


## Prof. Massimo Buonomo

*International Electrotechnical Commission, Switzerland*


### AI Act and Human Rights in AI: A Model for Global Legislation

In the pursuit of safeguarding fundamental human rights regardless of nationality or status, the EU has taken significant strides with the adoption of the AI Act. This legislation addresses critical areas such as freedom of expression, the right to privacy, freedom of thought, equal treatment, and more. It is the first legislation of this kind in the world. Moreover, the AI Act addresses the use of particularly invasive artificial intelligence systems, such as those claiming to infer emotions from biometric data, which significantly impact the fundamental rights to privacy, autonomy, and dignity. Notably, regulations surrounding the use of emotion recognition systems (ERS) in law enforcement applications have been outlined. For instance, authorities utilizing ERS are not obligated to inform individuals when subjected to these systems. In addition to prohibiting certain AI practices like social scoring, the AI Act sets a precedent for comprehensive legislation that balances technological advancement with the protection of human rights. This framework serves as a model for global legislation, providing guidance on ethical AI development and usage while upholding the dignity and rights of individuals worldwide. Furthermore, the AI Act establishes risk profiles of individuals based on monitoring their behavior, such as criminal or financial activities, and penalizes citizens with low scores by denying them access to essential public services. This legislation extends to private actors as well, prohibiting the use of AI for social scoring and exploiting the vulnerabilities of individuals due to their social or economic situation. Recent incidents such as the use of facial recognition technology leading to wrongful arrests underscore the importance of robust regulation in AI deployment. Instances like the case of Randall Reid, wrongly arrested due to misidentification through facial recognition technology in Louisiana, highlight the urgent need for legislative measures to address potential abuses of AI systems by authorities. By enacting comprehensive regulations and holding both public and private entities accountable, the AI Act serves as a beacon of ethical AI governance and human rights protection on a global scale.

### Biography

**Prof. Massimo Buonomo** is a highly regarded professional in the Artificial Intelligence and blockchain field. Massimo is a former UN Global Expert in Artificial Intelligence Metaverse, blockchain. Massimo is an International AI Expert - Ethics in Autonomous and Artificial Intelligence Applications at the IEC (International Electrotechnical Commission), a specialized think-thank on Ethics in AI. Massimo is a board advisor and consultant for international organizations, start-ups, central banks, and corporates. After working in international financial markets for 20 years, Massimo worked as an international finance university professor in Rio de Janeiro, Brazil, Turin, Italy, and Wuhan, China.

GLOBAL WEBINAR ON

# ARTIFICIAL INTELLIGENCE & DATA SCIENCE

APRIL 15-16, 2024 | WEBINAR

## Mr. Max Mozgovoy

*SegmentValue, Netherlands*

## Applications and perspectives of AI in Customer Relationship Management

The integration of Artificial Intelligence (AI) in Customer Relationship Management (CRM) is revolutionizing how businesses engage with and understand their customers. The research explores the applications and perspectives of AI in CRM, highlighting the transformative impact on customer interactions and organizational strategies. It seeks to answer the following research question: "How do AI applications in CRM impact customer interactions and organizational strategies, and what are the key perspectives shaping its implementation?" Key topics will cover a range of applications of AI in CRM area, including predictive analytics, chatbots, sentiment analysis, and personalized service/marketing agents. These technologies empower businesses to anticipate customer needs, personalize interactions, and automate routine tasks, thereby enhancing operational efficiency and improving overall customer satisfaction. By identifying practical use cases and understanding the perspectives driving AI adoption in CRM, this study aims to provide valuable insights for businesses navigating the intersection of technology and customer relations. This research combines a case study of AI implementation in CRM with qualitative insights gathered through interviews and surveys with CRM users and experts. The research findings illuminate the significant positive impact of AI in CRM, showcasing improved customer satisfaction, enhanced operational efficiency, and strategic decision-making. The results also reveal key perspectives influencing AI adoption, encompassing technological readiness, ethical considerations, and the organizational capacity for change. By understanding the applications and perspectives surrounding AI in CRM, businesses can strategically leverage these technologies to stay competitive and foster sustainable customer-centric practices. The study contributes to the ongoing discourse on the role of AI in CRM, providing actionable insights for businesses navigating the evolving landscape of customer relationship management.

**Keywords**: AI, CRM, Chatbots, LLM, Customer service, Personalized marketing

### Biography

**Mr. Max Mozgovoy is a** AI and Machine Learning expert in CRM applications with more than 20 years of global experience, He is currently based in the Netherlands. Holding an MBA with honors and a Master's in Applied Mathematics and Physics, Max's career spans pivotal roles in leading international companies. At SegmentValue, Max provides services to diverse clients, achieving notable successes in the strategic development of AI and CRM solutions. His impact extends to roles at 11 international companies like GoStudent, GameHouse, Wargaming, and others where he led various projects, orchestrating implementations of Advanced Machine Learning, BI and CRM systems.

## Miss. Maya Sherman

*American India Foundation, India*

### AI and Critical Deepfake: Lessons from Electoral Processes

The increased development of generative AI in recent times has transformed technological discourse and exposed millions to the impact of artificial intelligence and automation capabilities on human livelihoods. Considering the impact of the 2016 affair of Cambridge Analytica on the mainstream agenda, the role of AI-driven propaganda in 2023 requires additional scrutiny with the empowered capability to fabricate user content, sound, and visuals in the form of deepfakes and AI-driven online falsehoods. Content moderation has become increasingly important in critical settings and times of crisis. In the contemporary context, with the upcoming electoral processes, governments and policymakers are concerned with the alleged threat of deepfakes. When addressing the phenomenon of critical deepfake during electoral processes, it is of paramount importance to address the role and responsibilities of each entity, including governments, policymakers, and users. The article highlights the ambiguous role of AI in content generation and moderation and calls for additional scrutiny of the impact of generative AI on such processes. The accelerated user engagement with ChatGPT and other interfaces requires the establishment of socio cultural and ethical safeguards protecting online users and supporting content moderation techniques, both human and automated.

**Keywords**: Deepfake, AI, Elections, Manipulation, ChatGPT

**Biography**

**Miss. Maya Sherman** is an AI Policy Researcher, Ethicist, and Lecturer with an MSc from Oxford Internet Institute. She is an AI expert in the Global Partnership on Artificial Intelligence, co-leading AI literacy programs for the Indian informal sector.

Maya has over a decade of experience in analysing tech products, services, and policies, focusing on responsible AI, social innovation, content moderation, and digital transformation. Currently, she works as an AI consultant in India, providing digital transformation advisory services to climate NGOs and policy think tanks. Her studies are published in leading academic journals focusing on the intersectionality of AI and disinformation.

GLOBAL WEBINAR ON

# ARTIFICIAL INTELLIGENCE & DATA SCIENCE

APRIL 15-16, 2024 | WEBINAR

## Mr. Moshood Yahaya

*University of Bradford, UK*

## Critical Evaluation of the Future Role of Artificial Intelligence in Business and Society

In contemporary economies, artificial intelligence (AI) and machine learning (ML) algorithms are frequently utilised in generating judgments that have far-reaching consequences for employment, education, access to finance, and a variety of other fields. The increasing level of advancements in artificial intelligence (AI) has substantially affected the functionality of societies and economies, prompting extensive debate over the merits and demerits of AI on the society and humanity at large. Moreso, the emergence of Generative Artificial Intelligence technologies like the ChatGPT (by Microsoft) and Bard (by Google) has ushered in an era of immense transformance to business operations, communication, and research, inflicting some unprecedented challenges, from the usage by humans. In view of this ensuing rapid transformations, this research critically explored the benefits and demerits of artificial intelligence, from the viewpoint of its impact on people, businesses, economies, and the society, from an ethical, legal and governance perspectives. While it is imperative that public welfare is religiously promoted and guarded, it is equally necessary to consider the interest and success of AI developer and their organisations. Therefore, it is essential to maintain an optimum balance between ethical principles. Our findings shows that experts are proposing an era of AI ethics that focuses on utilitarianism, which presents a balance between risks and benefits, and a movement from fundamental duty of care to civil responsibility for public good. National and continental associations have reacted promptly by establishing various regulations for the conduct of AI implementation in their jurisdictions. The General Data Protection Regulation (GDPR) permits individuals to provide general consent in relation to their information. The continuous investment and research focus on further development of artificial intelligence, shows that the future of individual lives, businesses and economies will continuously be influenced by numerous everyday artificial intelligence functions.

### Biography

Mr. Moshood Yahaya is a reliable professional with multiple years of experience dedicated in using data to provide insight and make informed decisions, with creative problem-solving approaches to tackling challenges, with broad experience in consulting, investment, finance, energy and retail. His expertise is placed within machine learning and data science modelling, market analysis, forecasting, making informed decisions, business intelligence, business process optimization, revenue assurance, performance analysis and customer need assessments. He is passionate about solving ranging industrial problems and highly competent in data science, product development, machine learning product development, machine learning product research, and machine learning engineering. He is a knowledge sharing and capacity building, with track records of data science and artificial intelligence community building. He is a top level researcher, energetic presenter and confident communicator with records of public speaking at major events and conferences with the ability to communicate insights clearly and efficiently for decision making processes.

GLOBAL WEBINAR ON

# ARTIFICIAL INTELLIGENCE & DATA SCIENCE

APRIL 15-16, 2024 | WEBINAR

**Dr. Rami Ayoob**

*Spark Information Technology, Bahrain*

## The Role of AI in Digital Transformation

As digital transformation continues to reshape industries and organizations, artificial intelligence (AI) is playing a key role in driving this change. AI 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. AI 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 AI in digital transformation include: Data analysis: AI algorithms can analyze large amounts of data quickly and accurately, providing insights and trends that can help businesses make informed decisions. Automation: AI-powered systems can automate repetitive tasks and workflows, increasing efficiency and allowing employees to focus on more strategic activities. Personalization: AI technologies can analyze customer behavior and preferences to deliver personalized experiences, recommendations, and interactions. 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. Process optimization: AI can optimize business processes by identifying inefficiencies, suggesting improvements, and streamlining operations for better performance and cost savings. Enhanced customer experiences: AI-driven chatbots, virtual assistants, and personalized recommendations can improve customer satisfaction, engagement, and retention. 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.

## Biography

Dr. Rami Ayoob is an innovative and result-oriented professional with over 18+ years of executive-level experience and responsible for all aspects of strategic Technology planning and achievement of Enterprise goals. He is a CEO of Spark Information Technology, a technology focused on developing innovative solutions to tackle modern business challenges. With years of experience in the technology industry, have a proven track record of leading successful projects and teams. As a dynamic and forward-thinking leader, He has embraced the latest technological advancements, such as Artificial Intelligence and Machine Learning, to drive innovation and productivity in my organization. He is also Founder of Astro Tech Hub, to conduct research into various aspects of the universe. This involve designing and carrying out experiments, analyzing data, and publishing research papers, development of theoretical models to explain the behavior of celestial objects and phenomena. This may involve using mathematical equations to simulate different scenarios and predict outcomes.

GLOBAL WEBINAR ON

# ARTIFICIAL INTELLIGENCE & DATA SCIENCE

APRIL 15-16, 2024 | WEBINAR

**Dr. Rosario Moscato**

*Live Tech/APRA, Italy*

## Harmonizing Technology and Humanity: Global Ethical Standards for AI

In the rapidly evolving field of Artificial Intelligence (AI), striking a balance between unlocking unprecedented societal benefits and addressing significant ethical concerns is essential. The creation of global ethical guidelines is recognized as a critical step in navigating the complex dynamics between AI's potential for innovation and its accompanying risks. These include threats to privacy, security, employment, and the risk of perpetuating biases if not judiciously managed.

The discussion emphasizes the urgent need for international collaboration to develop and implement ethical standards capable of mitigating these risks while enhancing AI's benefits for society. Establishing ethical AI practices is key to ensuring that technological advancements align with fundamental human values, fostering trust and inclusivity. A focus on transparency, accountability, and fairness is vital for directing AI development towards positive societal impacts, such as advancements in healthcare, education, and environmental sustainability, and away from negative consequences like increased surveillance, autonomous weaponry, and algorithmic discrimination. The conversation will include case studies showcasing the positive effects of ethically guided AI applications, the obstacles in creating universal ethical standards, and the proposition of a cooperative framework for global collaboration among various stakeholders, including policymakers, technologists, and civil society. This interdisciplinary approach is crucial for addressing the multifaceted ethical issues AI presents, ensuring that it serves the diverse needs and values of the global community. In conclusion, a unified global effort to establish ethical guidelines for AI is advocated. Such an initiative is vital to reduce potential threats and fully leverage AI's capability to contribute positively to society, ensuring a future where technological innovation progresses hand in hand with ethical responsibility.

**Keywords**: AI Ethics, Responsible AI, Trustworthy AI

### Biography

**Dr. Rosario Moscato** is a seasoned Artificial Intelligence expert with over 25 years of experience holding degrees in electronic engineering, internet software design, and advanced studies in science and faith. His career has spanned across Europe and Asia, taking on diverse roles in technical and business development within various international companies. Recently, Rosario has dedicated his efforts to leveraging machine learning technologies to boost business competitiveness, while also exploring the ethical and philosophical aspects of AI. He is an author, international speaker, trainer, and consultant in AI, currently serving as CTO for a pioneering AI company in Italy.

GLOBAL WEBINAR ON

# ARTIFICIAL INTELLIGENCE & DATA SCIENCE

APRIL 15-16, 2024 | WEBINAR

## Prof. Leila Ben Ayed

*National School of Computer Sciences ENSI, Tunisia*

### Toward System model Safety Requirement Proving using Artificial Intelligence

Advances in technology are enabling a safety requirement revolution. There is a lot of noise utility and feasibility of formal methods, theorem proving and model checking which could be seen as anticipated solutions for safe reactive and concurent systems. There are a number of challenges and hurdles in the early stages of incorporating such solutions  in to software development processes. This presentation will discuss these challenges and what needs to be done to address these concerns around cost of modeling verification, implementation, integration capability, and how can Artifcial Intelligence help in this field.

Keywords: Reactive systems, Modeling, Verification, Artificial Inteligence

### Biography

Prof. Leila Ben Ayed is a Professor of Computer Science at University of la Manouba - National School of Computer Science (ENSI) Tunisia and member of LIPSIC Laboratory, FST, University of Tunis el Manar. She obtained her PhD thesis from National Polytechnic Institute of Lorraine, INPL, France and Faculty of Science of Tunis, University Tunis el Manar, Tunisia. She is engineer in Computer Science from the Faculty of Science of Tunis, Computer Science Department. Her recent activities are related to Theoretical Computer Science, Formal Methods for Software Development – Model Checking – Refinement – Theorem proving - Worktlow applications – Distributed applications - Model Transformation.

## Mr. Martez Knox

*BakedBot AI, United States*

### Beyond Algorithms: How Autonomous Agents Predict and Adapt to Consumer Behavior

We'll explore the revolutionary impact of autonomous agents on personalized marketing. These AI-driven entities are redefining the way businesses interact with their customers by offering unparalleled personalization. Through real-time data analysis and adaptive learning, autonomous agents can predict customer preferences and behaviors, leading to highly targeted marketing strategies. We'll examine case studies, ethical considerations, and the future potential of these technologies to enhance customer engagement and drive business growth, while also addressing the balance between personalization and privacy.

Keywords: Machine learning, Artificial intelligence, Personalization, Marketing, Autonomous agents, Customers

### Biography

Mr. Martez Knox is a Chicago-raised tech innovator and seasoned marketer with a rich career blending digital savvy and entrepreneurial spirit. Educated in Business Management at Robert Morris College, he quickly made his mark in digital marketing and machine learning through pivotal roles at M.L. Ellis Construction and Third World Press. In 2012, Martez co-founded Creatively Smart, making waves in experiential marketing for major clients like ADT and Vivint. His journey continued with the 2023 launch of BakedBot.ai, a venture into machine learning, which landed him in the esteemed BLKtech Founders and PYROS Accelerator at 1871, showcasing over two decades of relentless innovation and leadership.

## Miss. Milena Živković

*Milena Živković[1], Marina Svičević[1], Lazar Krstić[1], Filip Andrić[1], Tatjana B. Miladinović[2], Dragana Krstić[1]*

*[1]University of Kragujevac, Faculty of Science, R. Domanovica 12, 34000 Kragujevac, Republic of Serbia*

*[2]Institute for Information Technologies, Department of Physics, Kragujevac, Serbia*

## AI in radiation therapy optimization: FOTELP-VOX program enhancement

The intersection of Artificial Intelligence (AI) and medical physics heralds a new era for radiation therapy, promising enhancements in precision, safety, and outcomes for cancer patients. This introductory presentation explores the theoretical and practical facets of integrating AI technologies, particularly in the optimization of radiation treatment planning. As the medical community stands on the cusp of this technological revolution, understanding the potential applications, challenges, and benefits of AI in medical physics becomes paramount. Central to our discussion is the potential of AI to automate and refine the processes within the FOTELP-VOX program, a tool critical for simulating particle transport and interactions in radiation therapy. The traditional methodology, heavily reliant on manual optimization, is juxtaposed with AI-driven approaches, showcasing a future where treatment plans are not only devised more efficiently but with greater adherence to the dual objectives of maximizing tumor eradication and minimizing exposure to organs-at-risk (OARs). Our work aims to demystify AI's role in medical physics, offering insights into Bayesian Optimization (BO) and Genetic Algorithms (GA) as pivotal technologies for enhancing the FOTELP-VOX framework. We address the technical and practical challenges associated with the adoption of AI in medical applications, such as computational costs and time consumption. Furthermore, we concentrate on the ethical dilemmas inherent in the utilization of AI in medicine, particularly concerning the preservation of personal data privacy. Finally, we emphasize the significance of interdisciplinary collaboration.

**Keywords**: Medical physics, Radiation therapy, FOTELP-VOX, Optimization, Organs-at-Risk.

### Biography

**Miss. Milena Živković** born on September 1, 1995, in Kragujevac, Serbia, is a highly accomplished academic excelling in physics and radiation science. Graduating with an exceptional 9.49 GPA during her undergraduate studies, she was consistently recognized as the top-performing student at the Faculty of Sciences and Mathematics for four consecutive years. Currently pursuing postgraduate studies specializing in physics, Milena maintains an impressive 9.67 average grade. Her dedication to advancing the field is evident through her extensive publication record and active involvement in research projects, including a Ministry of Education-funded project on "Experimental and Theoretical Research in Radiation Physics and Radioecology." Additionally, Milena serves as an editor for the journal "Imaging and Radiation Research" and contributes as a reviewer for "Radiation Science and Technology." As one of the authors of the monograph "Application of Monte Carlo programs and phantoms in Dosimetry", she showcases her expertise in dosimetry, further solidifying her reputation as a prominent figure in physics and radiation science.

GLOBAL WEBINAR ON

# ARTIFICIAL INTELLIGENCE & DATA SCIENCE

APRIL 15-16, 2024 | WEBINAR

**Mr. Sameer Ranjan**

*Catenate Corp, USA*

## Digital Data Twin for Human Skill Transformation

The concept of a Data Digital Twin (DDT) represents a paradigm shift in leveraging digital replicas of physical systems for enhancing decision-making processes. This paper introduces a novel framework for the development of a Data Digital Twin specifically designed for the digital transformation of human skills in the workforce. Amidst the rapidly evolving technological landscape, there is an urgent need for mechanisms that can accurately model, analyze, and predict the future skill requirements of employees across various sectors. Our proposed DDT framework addresses this need by integrating advanced data analytics, machine learning algorithms, and simulation techniques to create a dynamic model that mirrors the skill inventory of a workforce. This model allows organizations to visualize the current skill gaps, predict future trends in skill demand, and identify the most effective strategies for skill development and transformation. The framework also incorporates feedback mechanisms to continuously update the digital twin based on real-world outcomes and evolving industry requirements. By providing a comprehensive and adaptable tool for skill transformation, the DDT framework empowers organizations to stay ahead in the digital economy, ensuring their workforce remains competitive and adaptive. This paper demonstrates the application of the DDT framework through case studies and discusses its implications for workforce development and strategic planning.

Keywords: Data Digital Twin, Human Skills, Workforce, Development, Prediction.

### Biography

Mr. Sameer Ranjan 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.

GLOBAL WEBINAR ON

# ARTIFICIAL INTELLIGENCE & DATA SCIENCE

APRIL 15-16, 2024 | WEBINAR

## Dr. Rastafa I. Geddes

*Geddes Neural Network (GNN), USA*

## Cognitive Sentients and The AI CHILD: How Close Are We to Artificial Consciousness?

Artificial Intelligence (AI) has made remarkable strides in mimicking human cognitive processes, raising profound questions about the emergence of artificial consciousness. This talk delves into the concept of Cognitive Sentients and explores the advancements that bring us closer to the realization of Artificial Consciousness – a milestone in AI evolution. We dissect the fundamental principles of cognitive computing, examining how machine learning algorithms, neural networks, and deep learning architectures enable AI systems to simulate human-like cognitive abilities. Through examples from natural language processing, image recognition, and decision-making tasks, we highlight the remarkable progress made in AI's ability to emulate human thought processes. Furthermore, we scrutinize the ethical implications and societal ramifications of creating conscious-like AI entities, probing the boundaries between machine intelligence and sentience. Discussion will revolve around philosophical inquiries into the nature of consciousness and the criteria for attributing consciousness to AI systems. Drawing parallels between cognitive science, neuroscience, and AI research, we assess the current state of AI consciousness research and speculate on the future trajectory. We explore ongoing efforts to imbue AI systems with self-awareness, emotional intelligence, and introspective capabilities, challenging the traditional dichotomy between human and machine intelligence. Join us for an intriguing exploration of the frontier of AI research, where cognitive sentients and the AI CHILD (Conscious, Human-like, Intelligent, Learning, and Decision-making) concept blur the lines between artificial and human consciousness. Through this discussion, we aim to provoke thought, inspire curiosity, and navigate the complexities of a world where artificial minds may one-day exhibit traits akin to consciousness.

**Keywords**: Self-aware AI, Cognitive Computing, Sentience Debate, No Training Data, True Comprehension

### 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

GLOBAL WEBINAR ON

# ARTIFICIAL INTELLIGENCE & DATA SCIENCE

## APRIL 15-16, 2024 | WEBINAR

**Dr. Tony de Bree**

*Consulting, Training & Coaching,Netherlands*

### Right-Skilling For The AI-Powered Economy

The 'democratization of AI' since 2022, is having a huge impact on roles, functions and jobs across disciplines and industries. Including in marketing, finance, ICT and even management consulting. At the same time, it presents huge opportunities for managers, employees, and HR-professionals, and for startups, scaleups, SMEs and solopreneurs in the AI-powered economy including in the exploding online gig economy.

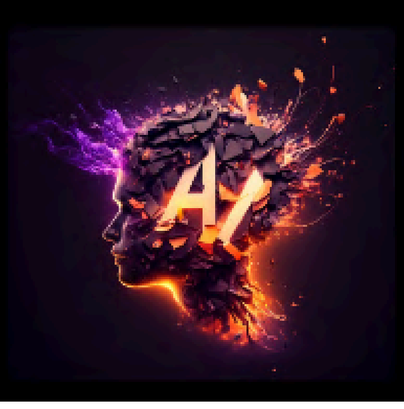
The most important online trends around AI including in generative AI are developing at a much faster pace than traditional trendwatchers, management consultants, corporate trendwatchers and professors at universities and business schools are seeing in their own limited online world. AI-Reskilling or AI-Upskilling will not be enough. Focus of managers, employees, HR-professionals and (future) entrepreneurs should be on AI-Right-Skilling, Fast Learning, and personalized learning paths.

In this lecture, Tony will cover the characteristics of what is called 'The Great AI-Layoff' including examples of sectors, jobs, functions, and roles most impacted by AI; Personal Right-Skilling for AI with examples for leaders, managers, employees, HR-professionals and for successful (future) AI-entrepreneurs; Strategies for AI Right-Skilling and AI. Explaining the digital substitution trend and including examples of online learning trends in the old-world of universities and business schools and in his own new online world of online learning platforms and on-demand online learning; The Future of Your Work & Income covering examples of projected work trends in the near future, implications for the future of your own work and income and finally, some personal tips by Tony on the need for fast and relevant life-long right-skilling of different soft- and hard skills

Keywords: AI Democratization, AI Reskilling, AI Right Skilling, The Great AI Layoff, Online Learning Platforms, Future of Work

### Biography

Dr. Tony de Bree worked 26 years in global Financial Services including corporate venturing en T&D. He completed his EEP MBA at business schools like The Wharton School. He has a PHD in B.A. on 'Digital Transformation in FinServ'. He is bestselling author of management books in English & Dutch. He started making money online as side-hustle in 2001. He left the Corporate Rat Race to (2011) to become a successful entrepreneur. He obtained a FinTech Certificate @MIT & 'ICT-Member Board Of Advisors'. He is online trendwatcher, AI-Entrepreneur, digital strategy & change consultant, AI-speaker, mentor, business & career coach & digital content creator.




ARTIFICIAL INTELLIGENCE
DATA SCIENCE

APRIL 15-16, 2024
WEBINAR

CONFERENCES

GLOBAL WEBINAR ON

# ARTIFICIAL INTELLIGENCE & DATA SCIENCE

APRIL 15-16, 2024 | WEBINAR


## Miss. Aishwarya Rai

*Sofy.AI, USA*


### Machine Learning for Managers

In this talk, we will build a foundational understanding of what machine learning is, how it works and when and why it is applied. To successfully manage an AI team or product and work collaboratively with data scientists, software engineers, and customers we need to understand the basics of machine learning technology. This talk provides a non-coding introduction to machine learning, with focus on the process of developing models, ML model evaluation and interpretation, and the intuition behind common ML and deep learning algorithms.

At the conclusion of this talk, you should be able to explain how machine learning works and the types of machine learning, describe the challenges of modeling and strategies to overcome them and identify the primary algorithms used for common ML tasks and their use cases.


Keywords: Artificial Intelligence, Machine Learning, ML Models, Data Science, Deep Learning


### Biography

Miss. Aishwarya Rai has more than 5+ years worth of track record as a Tech Evangelist & Product Manager in AI, ML & Tech startups in India & USA. She is currently a Product Manager at a leading AI & Automation startup in the USA, and was a former Senior Product Manager at an Asian EdTech unicorn. Her research background is from Max Planck Institute Germany in AI & she hold a Bachelor's in CS from IIT Delhi. She is a mentor for several early-stage startups and entrepreneurs at top-tier incubators & accelerators such as Alchemist Accelerator (USA), Faster Capital (UAE) and GrowthMentor (Europe). She has been conferred upon several nationally recognized awards such as "Young Achiever Award 2024" and "Technology & Innovation Leader of the Year Award 2024". Her contribution to AI, Technology and the Startup ecosystem has also been recognized by leading business journals from SE Asia such as Business Standard and The Tech Outlook.

GLOBAL WEBINAR ON

# ARTIFICIAL INTELLIGENCE & DATA SCIENCE

APRIL 15-16, 2024 | WEBINAR

## Dr. Dmitrii Shapievskii

*ROYGBIV Projects, Germany*

## Revolutionizing Autism Education: Integrating AI, Deepfake, and Augmented Reality for Personalized Learning Environments

**Relevance:**
Creating an inclusive educational environment is a key aspect of modern teaching, especially for children with autism. Technologies such as AI, deepfake, and augmented reality (AR) offer new approaches to adapting the educational process, making it more accessible and interactive for students with special educational needs.

**Objective and Tasks**:
The study aims to develop methods for using AI, deepfake technology, and AR to create an adaptive learning environment for children with autism. The main tasks include analyzing the potential of these technologies for individualizing the learning process, as well as developing and testing algorithms to improve interaction and learning.

**Materials and Methods:** The foundation for the study included AI algorithms for analyzing and adapting educational materials, deepfake technology for personalizing visual content, and AR for creating interactive and immersive educational environments. Experiments were conducted in educational institutions involving groups of children with autism.

**Results and Discussion:** The results showed that integrating AI, deepfake, and AR significantly improves engagement and learning effectiveness for children with autism. Personalizing materials and creating an adaptive environment using AR facilitates better understanding and assimilation of information. The potential for further integration of these technologies into the educational process is discussed.

**Conclusions:** The use of AI, deepfake technology, and AR in education opens new possibilities for creating an adaptive and effective learning environment for children with autism. These technologies provide deeper immersion in learning material and promote the individualization of education, which is a crucial factor for inclusive education.

### Biography

**Dr. Dmitrii Shapievskii** has a Ph.D. in physics and mathematics from 2007 and he has over 30 years of software development experience. For the last decade, his focus has shifted towards AI, and VR/AR, applying his vast expertise to these cutting-edge fields. His career, spanning development to project management has addressed complex challenges in finance, utilities, and ISS space experiment planning. A steadfast advocate for the #TransparencyManifesto, Dmitrii champions EngX, AI-powered SDLC, with an unwavering commitment to quality, security, and common sense. He is the Founder of ROYGBIV Projects and co-author of the Pareto-Shapievskii Principle, he is dedicated to leveraging technology to enhance transparency and drive innovation.

GLOBAL WEBINAR ON

# ARTIFICIAL INTELLIGENCE & DATA SCIENCE

APRIL 15-16, 2024 | WEBINAR

## Prof. Saeed Amal

*Northeastern University, USA*

### An Artificial Intelligence based Tool for Digital Pathology and Therapy Recommendations

Prostate cancer is a significant cause of male cancer-related deaths in the US. Checking how severe the cancer is helps in planning treatment. Modern AI methods are good at grading cancer, but they are not used much in hospitals yet. We developed a new online tool that combines human expertise and smart AI predictions to grade prostate cancer. Experienced doctors helped us improve the tool by answering questions in a survey and a test called the NASA TLX Usability Test. This helped ensure that the tool meets the needs of intended medical users and proves a valuable addition in clinics. The feedback obtained was positive for three themes that included acceptability, ease of use, and understanding with suggested application feature improvements as feedback for real world hospital use.

### Biography

Prof. Saeed Amal is an Assistant Research Professor at Northeastern University and a member of the research institute The Roux Institute. Amal is focusing on the use AI and multimodal data in medicine for improving cardiovascular disease and cancer. Amal was a Postdoctoral Fellow at the Stanford University School of Medicine. Amal is a former VP of an R&D data medical startup in the field of cardiology. Amal has vast leadership experience in AI based research from both academia and the tech industry General Electric and General Motors. Amal's research interests are the precision medicine, healthcare applications for artificial intelligence, including deep learning and machine learning, natural language processing (NLP), image processing, and recommender systems.

GLOBAL WEBINAR ON

# ARTIFICIAL INTELLIGENCE & DATA SCIENCE

APRIL 15-16, 2024 | WEBINAR

**Prof. Dana York**

*European Medical Laser Association, USA*

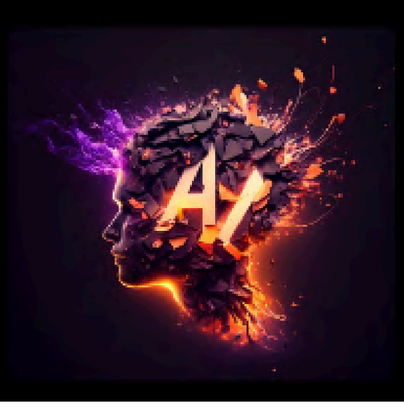
## Review of Artificial Intelligence in Medicine

Medical AI is here to stay and help both doctors and patients Imagine in Congo in a remote area where there is no hospital on a range of 500 miles how nice is to have this competent tool at our fingertips Imagine prof Stark, our greatest robotic Surgeon sa ving lives with robotic surgery from Germany to Afghanistan. The settings of my Photo Biomodulation device I have it is prepared with all the parameters for use, for each procedure That is AI We should not be afraid of it and it is there to stay Remember, someone programs all that AI Behind it is a human being and we can always pull the plug.

Keyword: Artificial intelligence, Medicine laser, Diagnostic, Laser, Photo biomodulation

## Biography

Prof. Dana York is an expert in the field of research in Lasers for Biomodulation Her academic background includes a degree in Education from the Academy of Distinguished Educators in Clinical Teaching (New York University), PhD in Laser Therapy and MSc in Biophysics and Cellular Technology (University Carol Davila, Bucharest). Professor York has served on the Board of Editors of the International Phototherapy Association of Japan. She has conducted clinical trials for photo biomodulation techniques with different technologies and has published this research in peer reviewed journals as well as presented at international conferences. She was awarded the prize for 'Best Research paper' at the Florence Laser Conference in 2002 as well as the International Academy of Laser Medicine and Surgery on Bone Regeneration in 2015. Professor York has recently joined the study group for Artificial Intelligence within the New European Surgery Academy. She sits as a delegate for Universal Healthcare at the United Nations and is a Fellow of the UK Royal Society of Medicine. Her first degree is as Doctor in Dental Surgery followed by Periodontology Dana is a philanthropist . Her work brings her to Africa to help the cause of the children victims of gender based violence.




ARTIFICIAL INTELLIGENCE
DATA SCIENCE

APRIL 15-16, 2024
WEBINAR

HK CONFERENCES

# UPCOMING WEBINAR

## 2nd GLOBAL WEBINAR ON

# ARTIFICIAL INTELLIGENCE & DATA SCIENCE

***August 17-18, 2024 in Zoom Meetings***