

**GITEX**  
GLOBAL

**16 - 20 OCTOBER**

MONDAY 11 AM - 5 PM | TUE - FRI 10 AM - 5 PM

**DUBAI WORLD  
TRADE CENTRE**

**EXPAND  
NORTH  
STAR**

**15 - 18 OCTOBER**

SUNDAY 11 AM - 6 PM | MON - WED 10 AM - 6 PM

**NOW AT DUBAI  
HARBOUR**

**THE YEAR  
TO IMAGINE AI IN  
EVERYTHING**

**The Largest Tech and Startup  
Event in the World,  
is now Even Bigger**

#GITEXGLOBAL  
#EXPANDNORTHSTAR

ORGANISED BY



*DRAFT WORKSHOP  
Subject to change*



16-20 OCT 2023 DUBAI WORLD TRADE CENTRE

NEW



15-18 OCT 2023 NOW AT DUBAI HARBOUR

## Ai Everything Workshop

Ai Workshop Room, Hall 9

Monday, October 16

11:30 – 12:30

### Achieving high accuracy rates in face detection with Deep Learning

By utilizing advanced algorithms and neural networks, we have achieved unprecedented levels of precision in identifying human faces, regardless of lighting conditions or facial expressions. This workshop will explore how deep learning technology has revolutionized the accuracy rates of face detection, delve into the technicalities of deep learning and showcase real-world applications of this groundbreaking technology.

12:30 – 13:30

### Practical applications for Image Recognition with Deep Learning

From identifying patterns in large data sets to detecting objects in complex environments, deep learning algorithms are revolutionizing the way we interact with images. Whether it's in healthcare, transportation, surveillance, or retail, the practical applications for image recognition with deep learning are virtually endless. This workshop will explore the current and future state of image recognition with deep learning and discusses how this technology is poised to transform various industries.

14:00 – 16:00

### Measuring Financial Performance & ROI of AI Models

In the rapidly evolving landscape of AI, understanding its business implications and quantifying its financial performance have become crucial for organizations striving to harness its potential. This comprehensive workshop delves into the intricacies of measuring the financial impact of AI projects and calculating their ROI. Through a structured approach, participants will gain insights into the various facets of AI investment and its implications on a business's bottom line.

Mohamed Sabri, Instructor and Mentor in AI and ML, Massachusetts Institute of Technology, Canada

Tuesday, October 17

10:00 – 11:00

### Personalized campaign management in Banking with Machine Learning

This workshop will explore the transformative potential of machine learning in tailoring marketing campaigns in the banking industry. Participants will delve into the techniques and methodologies of using machine learning algorithms to analyze customer data, predict customer preferences, and optimize campaign strategies.

12:00 – 13:00

### How Digital twins are simply building blocks of the Metaverse, and how can it optimize infrastructure?

In this workshop, you will learn how the metaverse and digital twins will alter the way we use infrastructure and transition from point A to point B permanently. You will address questions about what the Metaverse is, how it is connected to Digital Twins, why it is important to embrace this technological advancement to prepare our infrastructure for crucial changes, and what you need to know to begin using this technology and creating the building blocks.

Dana Kawas, CEO, Thynkli, Canada

## Ai Everything Workshop

Ai Workshop Room, Hall 9

Tuesday, October 17

13:00 - 14:00

### AI-Powered UX Design

AI has been gaining significant attention in the field of user experience (UX) design, and for good reason. As the demand for personalized and intuitive digital experiences continues to grow, AI can provide designers with new tools and techniques to create engaging and effective interfaces. This workshop will explore the ways in which AI is changing the landscape of UX design and how designers can leverage these technologies to create better experiences for users.

Workshop will cover the following points:

- Role of AI in user research
- How can AI-powered tools like sentiment analysis and user profiling help designers gain a deeper understanding of their target audience and create more tailored experiences?
- How can AI be used to automate repetitive tasks, such as testing and optimization.
- Benefits of using machine learning algorithms to identify patterns and predict user behavior, allowing designers to make more informed design decisions and optimize their interfaces for better engagement.
- Real-world examples of how AI is being used in UX design, including chatbots, virtual assistants, and personalized recommendations.
- Challenges of designing for AI-driven experiences and discuss how designers can balance the benefits of automation with the need for human touch and empathy.

Overall, this workshop will provide an overview of the ways in which AI is transforming UX design, highlighting the opportunities and challenges that come with these new technologies. Whether you are a seasoned designer or just starting out in the field, this workshop will provide valuable insights into the future of UX design and the role that AI will play in shaping it.

**Shaheer Malik, Product Designer, Unlayer, Pakistan**

Wednesday, October 18

10:00 – 11:00

### Industrial Metaverse and Enterprise AR: The next frontier of AI-powered transformation

The workshop will provide an in-depth exploration of the challenges and opportunities associated with Enterprise Augmented Reality and the Industrial Metaverse. Participants will learn about the status of the global enterprise AR market and key use cases, as well as how to harness the benefits of AR and accelerate adoption. The workshop aims to inform and inspire participants with the tools, insights, processes, and support needed to develop their own use cases, driving innovation within their organizations and shaping the future of industries. Additionally, the workshop will examine barriers to AR adoption, including security, safety, human factors, workforce implications, integration complexities, and regulatory frameworks.

Attendee profile:

Business leaders, technology practitioners, business unit managers, and staff looking to implement XR / metaverse technologies.

**Mark Sage, Executive Director, AR for Enterprise Alliance (AREA), USA**

12:00 – 13:00

### Building Trust in AI for Clinicians: Explainable and Interactive Approach

AI has several avenues in medical decision-making, as AI models provide valuable insights for clinicians. However, AI models are often viewed as black boxes and can be difficult to interpret. Hence, in a high-risk field such as medicine, clinicians find it challenging to build trust and confidence in using such models. This workshop will present an explainable AI model for diagnosing Retinal OCT diseases and uncover its underlying decision-making process. The session will also explain the various ways to interact with the model, evaluate it, and interpret the results. The workshop aims to bridge the gap between clinicians' concerns and AI capabilities and embark on the journey of transforming medicine with AI.

**Dr. Anish Agarwal, Global Head of Analytics, Dr. Reddy's Laboratories, India**

## Ai Everything Workshop

Ai Workshop Room, Hall 9

Wednesday, October 18

13:00 – 14:00

### Unleashing the Power of AI-Driven Digital Twins in Industrial Applications

Abstract: Join Pieter for the Generative Insights Workshop, where we delve into the revolutionary potential of AI-powered Digital Twins in industrial applications. This workshop will explore how the fusion of artificial intelligence and Digital Twins can transform various industries, enabling unparalleled insights and optimizing operations. Gain a comprehensive understanding of the capabilities, implementation strategies, and best practices for leveraging AI-driven Digital Twins. Prepare to unlock new possibilities and drive innovation by harnessing the power of generative AI and Digital Twins in your industrial endeavors.

Pieter Van Schalkwyk, CEO, XMPPro, Australia

Thursday, October 19

10:00 – 11:00

### The influence of technology on our brain

Interpersonal communication has changed dramatically in the era of digital transformation. Employees display a decline in personal abilities and traits. For instance, they may experience difficulties in reading and interpreting other people's emotions, communicating empathically, maintaining focus, memory retention, creativity, mental resilience, and self-confidence. This workshop emphasizes understanding the intersection between technology and the human brain and highlights why this knowledge is essential for leaders to effectively guide teams of the future. Through the lens of neuropsychology, the workshop provides the latest research insights and best practices in business by exploring the profound effects of technology on attention, memory, peak performance, and social interactions.

Tanja Dressen, CEO, DressenCoaching, Germany

12:00 – 13:00

### Unlocking the talent sourcing constraints: tech to do the impossible, increase quality and speed while reducing costs

Join this unique workshop to learn a practical framework for measuring the impact of new technologies on your HR function. This workshop will use proprietary data to measure the impact new technologies like AI are having on HR via applying a proven framework from project management to HR, the so-called triple constraint, to a new talent sourcing technology called a recruitment agency marketplace. If you've never heard of these before, then you need to come along to make sure you can:

1. Know the tradeoffs between different approaches to solving the same problem in HR (in this case talent sourcing)
2. Discover how we can measure this holistically and prove the business case of using technology (like recruitment agency marketplaces)
3. See practically what financial, speed and quality benefits can arise by scientifically quantifying the value such HR technologies provide.

This session would be suitable for CHRO, SVP of HR, VP of HR/talent acquisition, senior managers and managers in HR functions in medium to enterprise businesses who are looking for a way to better compete in the most difficult talent wars we have ever faced. Walk away with new tools and frameworks to measure division performance to elevate it to the next level.

Dr. Evan Shellshear, Global CEO & MD, Ubidy, Australia



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## Ai Everything Workshop

Ai Workshop Room, Hall 9

Thursday, October 19

13:00 – 14:00

### Convergence of Quantum Computing and AI

The convergence of quantum computing and AI is poised to change our world in unimaginable ways. With quantum computing's unparalleled computational power and AI's ability to learn and adapt, we're on the cusp of creating intelligent machines that can solve problems we never thought possible. From quantum machine learning to quantum cryptography, the possibilities are limitless.



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## GITEX Impact – Planet Labs

Impact Workshop Room, Hall 28

### Monday, October 16

13.00 – 15.00

#### Sustainability Goal Setting and Reporting

Setting and tracking sustainability goals are essential for organisations committed to sustainability. This session will delve into the process of establishing meaningful sustainability goals and effectively tracking progress. Participants will explore different approaches to goal setting, considering factors such as the United Nations Sustainable Development Goals (SDGs) and science-based targets. Insights into various tools and frameworks available for sustainability reporting, such as the Global Reporting Initiative (GRI) and the Sustainability Accounting Standards Board (SASB), will also be covered during this session.

### Tuesday, October 17

11.00 – 13.00

#### Sustainable Branding: Communicating Sustainability and Authenticity

In today's conscious consumer landscape, sustainability has become a critical factor in branding strategies. This session will explore the intersection of branding and sustainability, highlighting how organisations can effectively communicate their sustainability efforts and authenticity to consumers. Participants will delve into the significance of enhancing brand reputation while mitigating the risks of greenwashing whilst also addressing the importance of consumer trust and loyalty in the context of sustainability, in addition to exploring strategies to build meaningful connections with sustainability-minded consumers as well as practical insights into incorporating sustainability into their branding initiatives by creating a compelling narrative that resonates with their target audience.

14.00 – 16.00

#### Employee Engagement for Sustainability: Reinventing Corporate Culture

Engaging employees is a crucial aspect of fostering a culture of sustainability within organisations. This session will focus on strategies for effectively engaging employees in corporate sustainability initiatives. Additionally, the importance of aligning sustainability goals with employees' values and providing opportunities for them to contribute meaningfully to sustainability objectives will also be covered during this session giving the attendees practical insights into reinventing corporate culture to drive sustainable practices and employee engagement.

## GITEX Impact – Planet Labs

Impact Workshop Room, Hall 28

### Wednesday, October 18

11.00 – 13.00

#### Corporate Sustainability: Performance Management and Evaluation

Managing and evaluating sustainability performance is crucial for organisations committed to their sustainability goals. This session will delve into tools and methodologies for measuring sustainability performance. Participants will explore various metrics, key performance indicators (KPIs), and frameworks that can be utilized to assess sustainability performance. Additionally, the session will touch upon the significance of third-party evaluation and certifications to provide an external reality check on sustainability efforts. Attendees will gain insights into effective performance management and evaluation practices that can drive continuous improvement and enhance sustainability outcomes.

14.00 – 16.00

#### Accounting and Reporting Sustainability: How Can Finance Leaders Embrace ESG?

As sustainability gains prominence, finance leaders play a critical role in integrating environmental, social, and governance (ESG) considerations into financial reporting. This session will provide insights into the latest reporting standards introduced by the International Sustainability Standards Board (ISSB). Participants will gain practical knowledge on leveraging financial expertise to embrace ESG principles and effectively communicate sustainability performance to stakeholders.

### Thursday, October 19

11.00 – 13.00

#### Getting Started with Climate-Related Disclosures

As climate change poses increasing risks and opportunities for businesses, climate-related disclosures have become essential for organisations to communicate their approach to managing climate-related risks and opportunities. This session will emphasise the significance of climate-related disclosures, providing guidance on how businesses can get started. Real-world examples of climate-related disclosures will be shared to showcase best practices and inspire attendees to enhance their own reporting efforts. By the end of the session, participants will have a clear roadmap for initiating and improving their climate-related disclosure practices.

14.00 – 16.00

#### Combining Artificial and Human Intelligence for Climate-linked Financial Risk Assessment

Assessing financial and credit risks associated with climate change is crucial for investors and financial institutions. This session will focus on how AI can enhance environmental, social, and governance (ESG) risk assessment across asset classes, providing attendees with practical knowledge on using data and AI tools to drive investment decisions. The session will also discuss how tools such as ChatGPT can be utilised in sustainable finance and reporting. Participants will gain a comprehensive understanding of how AI can support climate risk assessment and improve corporate ESG disclosures.



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## GITEX Impact – Planet Labs

Impact Workshop Room, Hall 28

Friday, October 20

11.00 – 13.00

### Driving Organisational ESG Ratings: Enhancing Transparency and Sustainability Practices Across Your Business

ESG ratings have gained significant importance for businesses, as they provide valuable insights into a company's environmental, social, and governance performance. Participants will explore the internal and external factors that are considered in ESG ratings, including data disclosure, stakeholder engagement, risk management, and governance practices. Real-world examples of ESG ratings will be shared to showcase the impact of transparency and sustainability practices on improving ratings. Attendees will gain a deeper understanding of the benefits of enhancing transparency and sustainability practices and how they can drive organizational ESG ratings.



## GITEX Impact Boardroom

Impact Boardroom, Hall 28

### Monday, October 16

12.00 – 13.30

#### Sustainability Leadership: Embedding Sustainability into Corporate Culture and Business Decision-Making

In today's rapidly changing world, it is crucial for leaders to revisit their principles and adapt to evolving sustainability priorities. This session will explore how leadership can play a pivotal role in embedding sustainability into corporate culture and decision-making processes. Additionally, the session will delve into the importance of influence shareholders to taking climate action, engaging and empowering employees in sustainability initiatives, discussing actionable steps leaders can take to foster a culture of sustainability within their organizations.

**Shivam Kishore, Senior Advisor, Digital Transformation, United Nations Environment Programme (UNEP)**

14.00 – 15.30

#### Tackling Environmental Challenges Through AI: Strategies for Business Leaders

AI's advanced modeling capabilities enable accurate predictions and inform climate action strategies. Business leaders can integrate AI technologies into their sustainability strategies, optimising operations, reducing resource consumption, and fostering cross-sector partnerships. In this session, participants will explore how AI can revolutionise climate change mitigation and adaptation and, additionally, gain insights on how they can advocate for supportive policy frameworks and invest in AI talent development, harnessing the potential of AI to drive sustainable practices and contribute to a resilient future.

### Tuesday, October 17

11.00 – 12.30

#### Materiality Assessment: Identifying Sustainability Risks and Opportunities

Identifying sustainability risks and opportunities is crucial for organizations aiming to integrate sustainability into their operations. This session will provide guidance on conducting materiality assessments to determine the most relevant sustainability factors and stakeholders for a particular organization. Attendees will learn how to define the scope and criteria for effective materiality assessments, enabling them to gain a comprehensive understanding of the sustainability risks and opportunities specific to their organization's context.

**Sponsor**

13.00 – 14.30

#### Next-gen Supply Chains: Transparent, Traceable, and Sustainable Procurement

Supply chains play a vital role in driving sustainable practices across industries. This session will emphasize the importance of supply chain transparency and traceability in achieving sustainability goals. Participants will explore methods to identify and address sustainability issues within supply chain management, with a focus on sustainable sourcing practices that contribute to supply chain resilience. The session will also showcase innovative approaches and technologies that can enhance supply chain sustainability.

**Sam Achampong, Regional Director, Chartered Institute of Procurement and Supply (CIPS), UAE**

15.00 – 16.30

#### Harnessing Innovation to Drive Sustainability and Business Growth

Innovation is a powerful catalyst for driving sustainable business practices. This session will shed light on the role of innovation in fostering sustainability and provide insights into how collaboration and partnerships can encourage and facilitate innovation. Attendees will also explore the utilization of new technologies as tools for implementing sustainable solutions across various sectors.

**Rika Nakazawa, Global Vice President, Innovation and Head of Sustainability, Americas, NTT, USA**



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## GITEX Impact Boardroom

Impact Boardroom, Hall 28

### Wednesday, October 18

11.00 – 12.30

#### Sustainability Reporting: Communicating Corporate Sustainability Performance and Impact to External Stakeholders

Sustainability reporting has become increasingly important for organizations as they strive to communicate their sustainability performance and impact to external stakeholders, such as investors and the public. This session will highlight the significance of sustainability reporting and familiarize participants with common reporting frameworks and standards, including GRI (Global Reporting Initiative) and TCFD (Task Force on Climate-related Financial Disclosures). Attendees will gain insights into how to effectively measure and communicate corporate sustainability performance and impact, enabling them to enhance transparency and accountability.

13.00 – 14.30

#### Impact Investing: Shifting Investors' Mindset

The realm of investing is witnessing a notable shift towards impact investing, where financial returns are not the sole focus but also the positive impact on society and the environment. This session will explore the outlook for impact investing in 2023 and 2024, emphasizing the role of investors in driving this transformation in addition to exploring the potential risks and benefits associated with impact investing, providing participants with a comprehensive understanding of this growing investment approach.

Reserved for Save the Children Global Ventures

15.00 – 16.30

#### Creating Sustainable Smart Cities: Technologies and Strategies

The development of sustainable smart cities has emerged as a critical focus area in urban planning and development. This session will explore the leveraging of technology for sustainable urban development, including the key components that contribute to a sustainable smart city ecosystem. The discussion will highlight the significance of public-private partnerships in implementing smart city initiatives and showcase case studies of successful sustainable smart city projects.

Dr Jordi Vaquer, Secretary General, World Association of Metropolises, Spain

### Thursday, October 19

11.00 – 12.30

#### Climate Adaptation Finance and Blended Capital Solutions

As the impacts of climate change become increasingly evident, there is a growing need for climate adaptation finance and blended capital solutions. This session will delve into the significance of adaptation finance in addressing climate change challenges. Participants will explore future trends in climate adaptation finance and blended capital solutions, gaining insights into successful examples of innovative funding models that blend public and private capital to support climate resilience and adaptation initiatives.

13.00 – 14.30

#### Risks vs Returns: The Need for A Climate-related Financial Risk Framework

Climate change poses significant financial risks that need to be effectively managed. This session will discuss the current intersection of finance and climate change and explore the need for a climate-related financial risk framework. Attendees will be introduced to use cases of risk frameworks and gain a comprehensive understanding of how organizations can adopt a climate-related financial risk framework to identify, assess, and manage climate-related risks in their operations and investments.

Reserved for Moody's

15.00 – 16.30

#### Accelerating Sustainability: The Evolving Role of Incubators, Accelerators, and VCs in Advancing Sustainable Solutions

Incubators, accelerators, and venture capitalists (VCs) play a crucial role in fostering sustainable startups and innovations. This session will shed light on the evolving role of these entities in advancing sustainable solutions and will also emphasise the importance of impact measurement and evaluation in sustainable VC investments, ensuring the alignment of financial goals with positive environmental and social outcomes.



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## GITEX Impact Boardroom

Impact Boardroom, Hall 28

11.00 – 12.30

### Sustainability Obligations for CFOs: The Road to 2030

Chief Financial Officers (CFOs) have a pivotal role to play in driving sustainability within organizations. This session will explore sustainability reporting frameworks and discuss how CFOs can enable cross-divisional cooperation and foster a transparency mindset. Attendees will gain insights into leveraging environmental, social, and governance (ESG) data for making informed financial decisions. The session will also address how CFOs can influence boards to prioritize sustainability in corporate decisions and goals.

[Rhodri Preece, Head of Research, CFA Institute, UK](#)

## Global DevSlam Workshop

Global DevSlam Workshop Room, Hall 26

## Monday, October 16

11.45 – 13.50

## Introduction to Data Analysis Using Pandas

Working with data can be challenging: it often doesn't come in the best format for analysis, and understanding it well enough to extract insights requires both time and the skills to filter, aggregate, reshape, and visualize it. This session will equip you with the knowledge you need to effectively use pandas – a powerful library for data analysis in Python – to make this process easier. This is a hands-on workshop consists of lectures using Jupyter Notebooks for following along with the code and a set of exercises dispersed throughout to test each attendee's understanding. There are more questions provided in each section than the attendees will have time to answer so that those at all levels of prior experience have a challenge. After some time, I will go over the solutions to those exercises before resuming the lecture. This tutorial is for anyone with basic knowledge of Python and an interest in learning how to analyze data in Python. We will be working with Jupyter Notebooks, so attendees should familiarize themselves with the interface (i.e., know how to run/edit a cell) beforehand.

**Stefanie Molin, Data Science Author & Software Engineer, Bloomberg (USA)**

*Author of Hands-On Data Analysis with Pandas; full-stack software engineer; speaker at various conferences on Python and data science; open source contributor"*

13.50 – 15.55

## Tutorial on SQL in Python

SQL is a very important language for working with data. People who can write both SQL and Python can work across a broader spectrum in the data world as opposed to people who can do only one of the languages. How does SQL combine with python? - presenting the various ways to combine python with sql- exercises for a couple of the approaches

**Tereza Iofciu, PySV Board Member, Head of Data Science, neufische GmbH, Germany**

*Co-organizer of the PyLadies Hamburg group, winner of Python Software Foundation's community service award*

## Tuesday, October 17

12.35 – 14.40

## Three Musketeers: Sherlock Holmes, Mathematics and Python

In this workshop, we will explore how Sherlock Holmes, the famous fictional detective character created by Sir Arthur Conan Doyle uses Mathematics and Python programming language to solve crime mysteries. Mathematics is a science and one of the most important discoveries of the human race on earth. Math is everywhere and around us. It is in nature, music, sports, economics, engineering, and so on. In our daily life, we use mathematics knowingly and unknowingly. Many of us are unaware that forensic experts use mathematics to solve crime mysteries. In this workshop, we will explore how Sherlock Holmes, the famous fictional detective character created by Sir Arthur Conan Doyle uses Mathematics and Python programming language to solve crime mysteries. In short, the workshop begins with an introduction to forensic mathematics and covers basic principles thereby setting the stage. Then, we will solve simple crime puzzles using mathematics and simple python scripts. Finally, we will solve a few complex hypothetical crime mysteries using advanced python concepts. The participants will learn how to use the concepts of mathematics such as statistics, probability, trigonometry, and graph theory, and python and its packages such as SciPy, NumPy, and Matplotlib to solve the crime puzzles.

**Gajendra Deshpande, Lead of PyData Belgavi, Founder & MD, Eysec Cyber Security Solutions, India**

*An expert in securing Django framework applications, has developed prototypes and applications in Natural Language Processing, Machine Learning, Cyber Security, and Web applications using Python and its ecosystem*

14.40 – 16.45

## Mastering Python CI: How to Build and Optimize Your CI Pipeline

This workshop will explain the basics of Continuous Integration and help you build efficient CI pipelines.

- What is Continuous Integration, and why it's important for the project.
- Overview of different types of CI - from the local pre-commit hooks to Gitlab pipelines.
- How to build and optimize CI pipelines.

**Sebastian Witowski, Lead Developer, StatKraft, Poland**

*Developer of full stack software like portfolio management platforms or document management systems for companies including CERN, MUFG (biggest bank of Japan), and Statkraft (Norway's biggest energy producer)*



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## Global DevSlam Workshop

Global DevSlam Workshop Room, Hall 26

### Wednesday, October 18

10.30 - 12.35

#### Comprehending Comprehensions

Comprehensions make your Python faster and more idiomatic — but they're confusing. Join this workshop, and master them. In this hands-on workshop, participants will learn about comprehensions:

- The three different types (list, set, and dict)
- How to write them in an idiomatic, readable style
- Ways to use them for clearer, more efficient Python code

The workshop will include numerous hands-on exercises, to ensure that participants actually learn the material. And of course, there will be ample time for Q&A.

**Reuven Lerner, Python Trainer, Independent Developer, Israel**

Corporate Python trainer for Fortune 500 companies like Apple, Citibank, CISCO, Western Digital, VmWare, Intel, IBM and Paypal; writes three newsletters - Better Developers (about Python and > software engineering), Bamboo Weekly (using Pandas to analyze current > events), and Trainer Weekly (about the corporate training business)

12.45 - 14.40

#### Testing with Python for Fun & Profit

A practical overview of pytest, unittest and doctest. We'll look into the most popular testing frameworks for Python and write some code in order to become familiar with them and to compare their differences. Participants will need a laptop with Python 3 installed.

**Alexander Todorov, QA Guru & Python automation Tester, Founder & Creator, Kiwi TCMS, Bulgaria**

Created Kiwi TCMS an open source test management tool with over 1M+ downloads, maintainer of pylint-django, django-attachments

14.40 - 16.45

#### Iterators, Generators, Coroutines and asyncio

Building from Python's iterator protocol through asyncio for efficient I/O. This workshop starts with a deep, hands-on explanation of Python's iterator protocol, a fundamental technique, when crunching large datasets with high performance. It builds from these basics through generators, and eventually to asyncio, an essential tool for boosting network application performance.

**Uche Ogbuji, Co Founder, Zepheira & Library.Link, USA**

Played a pioneering role in technologies such as XML, Graph Databases and Web services, in the process leading several open source projects, and publishing hundreds of technical articles in industry journals such as IBM developerWorks, Application Development Trends & XML.com. Co-founded Zepheira and The Library.Link Network, which were acquired by EBSCO Information Services

### Thursday, October 19

12.35 - 14.40

#### Build a Production-Ready API with Python and Robyn

Join our hands-on workshop and discover how to build fast, production-ready APIs using Robyn, a developer-friendly web framework for Python. We'll guide you through key features like GraphQL, WebSockets, and data validation, as well as essential topics like app structure, database modeling, and code splitting. With our workshop, you'll gain practical experience and valuable insights into Robyn's simple and extensible API, middleware, and deployment process. Are you looking to build a fast, scalable, and production-ready API using Python? Look no further than Robyn - one of the fastest and most developer-friendly web frameworks on the market! In this hands-on workshop, you'll learn how to use Robyn to build a robust API that can handle a high volume of requests. We will walk you through the key features of Robyn, including its support for GraphQL, WebSockets, and data validation. You'll also learn how to take advantage of Robyn's easy deployment process, fast shipping process, and middleware functionality to customize your app's behavior. We'll cover essential topics like app structure, database modeling, and code splitting using views so that you can organize your code in a modular and reusable way. Additionally, we'll explore Robyn's simple and extensible API, which makes it easy to create a custom API that meets your unique requirements. Throughout the workshop, you'll have ample opportunity to practice your skills and ask questions. We'll provide a fully-functional codebase that you can use as a starting point for your own API, and our instructors will be on hand to help you troubleshoot any issues you encounter. By the end of the workshop, you'll have the confidence and expertise to build a fast, production-ready API using Python and Robyn. Whether you're building a web app, mobile app, or IoT device, this workshop is a must-attend event for anyone looking to take their API development skills to the next level. Sign up today and get ready to supercharge your API development workflow!

**Sanskar Jethi, Creator of Robyn, Starfyre, Software Engineer, Bloomberg, UK**

Creator of open source frameworks Robyn, used extensively by the travel industry for online bookings and Starfyre that enables developers to build reactive front-end and backend applications without learning a new language or framework

14.40 - 16.45

#### Embracing the power of Clean Object Oriented Programming with Structural and Behavior Design Patterns in Python

Writing production level clean code is the most important skill as a programmer one should know, as clean code is way more important than fast code. Code readability enhances a lot when you use Structural and Behaviour design patterns in your classes. In this workshop we will do hands on live coding to understand the applications and use cases of different design patterns in Python. We will re-structure already written classes to implement them in a more cleaner way using these design patterns. We will discuss patterns like Strategy, adapter, decorator, iterator etc.

**Sanket Singh, 6 Star rating at HackerRank, Software Engineer, Google, India**

Developer working on Google Pay used by 150 million users in India, Active experienced full stack web developer with over 40K Youtube subscribers, mentored over 25,000 budding software engineers

## Global DevSlam Workshop

Global DevSlam Workshop Room, Hall 26

## Friday, October 20

11.30 - 12.30

## Angular Workshop - Zero to Hero

"Have you always wanted to learn Angular? Are you looking to improve your Angular knowledge and learn from basics to advanced Angular? What if we told you that you could create a multi-user app with real-time communication in this workshop? Sounds exciting? Then your laptops ready. In this workshop, we will walk you through how you can create your first Angular Application. We're going to use Angular, AngularFire, Firebase and a bunch of cool techniques to build a production-ready web application that you can show off to your friends and colleagues. You will learn about the following:

- Angular CLI
- Creating your first Angular Application
- Standalone Components
- Signal Based Components Working with Google's Cloud Firestore
- Making API calls in AngularAngular Routing"

**Muhammad Ahsan Ayaz, Software Architect & Head Instructor, School of Applied Technology, Sweden**

*A Google developer expert in Angular JS, widely acclaimed for the ngx-device-detector library having 355 stars on GitHub and over 4.5 million installs*

**Santosh Yadav, Sr. Software Engineer, Celonis (Germany)**

*A Google developer expert in Angular JS, responsible for mono-repo to use module federation with Nx*

12.30 – 13.30

## Infrastructure engineering using Azure Bicep

Bicep is a language for declaratively deploying Azure resources. You can use Bicep instead of JSON for developing your Azure Resource Manager templates (ARM templates).

**Adora Nwodo, VP Nigeria for AR/VR Association & Founder, AdoraHack, Nigeria**

*African Tech Influencer, Builds Mixed Reality on the Cloud, Author of Cloud Engineering for beginners, Microsoft Award Winning Software Engineer*

14.30 – 15.30

## Developing code for metaverse experiences (topic TBC)

Developing code for metaverse experiences

**Zaid Zaim, Spatial Computing Expert & Microsoft MVP, Ignore Gravity GmbH, Germany**

*At age 21, is one of the 3200 Most Valuable Professionals as per Microsoft; building the ancient UNESCO city of Palmyra using Hololens and the metaverse*



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## Future Mobility Workshop

Blue Workshop Room, Hall 1

October 16 - 18

11.30 – 14.30

**Certified CPD accredited for Ai, Cars & Metaverse**

Learn from Dr Jane - Ai & Meta Influencer, Founder - World Metaverse Council, Top 20 Global Thought Leaders in Blockchain & Crypto, Top 100 women in Web 3, Futursit, Tech Investor, Australia (Course details awaited)

**Dr Jane Thomason, Founder of World Metaverse Council – EU in collaboration with Imperial college of London**

Tuesday, October 17

15.00 – 16.00

**EV circularity, lifecycle management and Blockchain applications with a special address to EU Battery Passport – Compliance, Regulations and Development**

**Sanshiro Fukao Board Member Mobility Open Blockchain International; Standardization Body, Japan**

Wednesday, October 18

10.00 – 11.00

**Designing Future Cars in the Ai Era - Sketching with Frank**

Learn first hand from Frank, one of the most influential, world-renowned, futuristic automotive designers, social media influencer, face of iconic car designs for Ferrari, Maserati, McLaren, Alfa Romeo, Fiat, Ford, BMW, Lancia, Liliun, MINI & more

**Frank Stephenson, CEO of Frank Stephenson Design Studio – UK**

14.30 – 15.00

**Finance and flying taxis / eVTOLs - Path to Air Worthiness Certification, Testing & Clearance, Security & Risk management**

**Part 1:**

Financing eVTOLs, Path to Air Worthiness Certification, Testing & Clearance, Security & Risk management - Learn with Diana Siegel, AAM Entrepreneur, Global Developer of Hybrid-Electric Aircrafts, Financial expert, Pioneer of Aurora's full-scale eVTOL, Strategic partner at Vports

**Part 2:**

Financing eVTOLs, Path to Air Worthiness Certification, Testing & Clearance, Security & Risk management, Building drive and fly cars - Learn with Maki - a Forbes 100 leading self-made women, serial entrepreneur, recognized by Japan's government, Inc. Magazine - 2023's most Dynamic Women Entrepreneurs and Guy - an ex - navy and defense veteran, founder of AKSA an 4seater eVTOL that drives like a car & flies like an aircraft, world's first flying car showroom and air mobility learning center, One out of the only 3 eVTOLs in the World to own a Federal Aviation Administration's air worthiness certificate to fly.

**Diana Siegel, CFO, Electra Aero – USA + Guy and Maki Kapinsky, Co-founders of ASKA Drive & Fly – USA**



NEW

16-20 OCT 2023 DUBAI WORLD TRADE CENTRE



15-18 OCT 2023 NOW AT DUBAI HARBOUR

## Future Mobility Workshop

Blue Workshop Room, Hall 1

Thursday, October 19

10.00 – 11.00

### What's the recipe to running a clean energy start-up in India?

Scaling start-ups in emerging economies - power hour. Learn from Anmol Jaggi, Co-founder, Blu Smart Mobility & Founder Gensol Engineering (NSE listed), India's first all clean fleet, World's largest Series A in the mobility sector led by BP, Combined valuation around 700 M USD

Anmol Jaggi, Co-founder, Blu Smart Mobility & Founder Gensol Engineering (NSE listed)

16.00 – 17.00

### Building an automotive brand in MEA

Why the MEA market is different, what's to learn and unlearn - power hour.

Omar Al-Zubaidi, President of Automotive Manufacturers Business Group - AMBG - Middle East & Africa, Head of Genesis Middle East and Africa HQs, MEA



## Energy Transition Workshop

Green Workshop Room, Hall 30

### Monday, October 16

11.00 – 12.00

#### Securing digital infrastructure / Predictive Analytics & Maintenance for Energy & utilities

- Introduction to Digital Infrastructure Security: Key challenges and vulnerabilities in digital infrastructure
- Cybersecurity Fundamentals: Understanding common cyber threats, attacks & importance of threat intelligence and real-time monitoring
- Security Measures for Energy & Utilities: Network security and segmentation, Data encryption and secure communication, Access control and authentication mechanisms
- Predictive Analytics Techniques: Machine learning and AI algorithms for predictive analysis. Developing predictive models for equipment failure and maintenance scheduling
- Implementing Predictive Maintenance: Integrating predictive analytics into existing infrastructure. Overcoming challenges in implementation
- Case Studies and Examples: Real-world incidents and their impact on energy and utilities
- Lessons learned and best practices from successful security & predictive maintenance implementations. Quantifiable benefits and ROI from predictive maintenance initiatives

### Tuesday, October 17

11.00 – 12.00

#### Grid Modernization and Digitalization

- Introduction to Grid Modernization: The evolving energy landscape and the need for grid modernization
- Key challenges faced by traditional energy grids
- Grid Technologies and Innovations: Smart grids and their components. Distributed energy resources (DERs) and their role in modernization. Microgrids and their benefits
- Integration of Renewable Energy: Challenges and opportunities in integrating renewable energy sources
- Storage solutions and their importance in a modernized grid.
- Regulatory and Policy Considerations: Global Government initiatives and regulations promoting grid modernization
- Incentives and barriers to adopting modern grid technologies
- Case Studies and Examples: Real-world examples of successful grid modernization projects. Lessons learned and best practices

12.30 – 13.30

#### Digital Twins in Energy

- Benefits and Applications of Digital Twins: Enhancing asset management and maintenance. Improving operational efficiency and performance. Facilitating predictive analytics and decision-making. Optimizing energy production and consumption.
- Creating a Digital Twin: Data collection and integration from various sources. Building a digital representation of physical assets and systems. Role of sensors, IoT, and data analytics.
- Types of Digital Twins in Energy: Asset-centric digital twins (e.g., power plants, turbines). Process-centric digital twins (e.g., energy distribution networks). System-level digital twins (e.g., smart grids, renewable energy integration).
- Implementation Challenges and Considerations: Data privacy and security. Scalability and integration with existing infrastructure. Skill and talent requirements for managing digital twins. Overcoming resistance to change and adoption.
- Role of AI and machine learning in advancing digital twins. Integration with emerging technologies like 5G and edge computing.
- Case Studies and Examples: Real-world examples of digital twin implementations in energy. Quantifiable benefits and ROI achieved through digital twin technology.

## Energy Transition Workshop

Green Workshop Room, Hall 30

Tuesday, October 17

14.00 – 15.00

### Datacenter Decarbonization for Energy

- Introduction to Datacenter Decarbonization: Understanding the environmental impact of data centers. Importance of reducing carbon emissions from data centers.
- Challenges and Opportunities: Identifying key challenges in datacenter energy consumption. Exploring opportunities for efficiency improvements and renewable energy integration.
- Energy Efficiency Strategies: Best practices for optimizing datacenter design and layout. Cooling solutions and their impact on energy consumption. Hardware and server-level optimizations.
- Renewable Energy Integration: Benefits and challenges of using renewable energy sources. Implementing solar, wind, and other renewable technologies in data centers. Power purchase agreements (PPAs) and energy storage solutions.
- Monitoring and Management: Importance of real-time monitoring for energy efficiency. Using data analytics for predictive maintenance and resource allocation. Implementing smart energy management systems.
- Policy and Regulatory Considerations: Government incentives and regulations promoting datacenter sustainability. International standards for datacenter energy efficiency and carbon reduction.
- Collaboration between data center operators, energy providers, and technology companies. Sharing best practices and lessons learned through industry partnerships.
- Innovations and Emerging Technologies: Exploring cutting-edge technologies like liquid cooling, AI-driven optimization, and edge computing. Potential for using data centers as energy storage resources.
- Case Studies and Examples: Showcasing real-world examples of datacenter decarbonization initiatives. Highlighting successful projects that achieved significant carbon emissions reductions

15.30 – 16.30

### Cybersecurity in Energy

- Cyber Threat Landscape in Energy: Overview of common cyber threats targeting energy systems. Recognizing the potential consequences of cyber threats to critical infrastructure.
- The role of AI and machine learning in enhancing cybersecurity.
- High-profile cyber-attacks and their impacts on energy operations. Evolving threat landscape.
- Key Principles of Energy Cybersecurity: Confidentiality, integrity, and availability (CIA) triad. Defense-in-depth strategy for layered security. Critical Energy Infrastructure Protection (CEIP):
- Government initiatives and regulations for protecting critical infrastructure. Compliance and cybersecurity standards specific to the energy sector.
- Identifying Vulnerabilities and Risks: Assessing cybersecurity risks in energy assets and systems. Conducting vulnerability assessments and penetration testing. Protecting Operational Technology (OT), Securing SCADA (Supervisory Control and Data Acquisition) systems, Isolating and segmenting OT networks from IT networks.
- Best Practices for Energy Cybersecurity: Access control and authentication mechanisms, Network segmentation and intrusion detection systems, Regular patching and updates for software and systems.
- Incident Response and Recovery: Developing an incident response plan for cyber-attacks. Strategies for rapid recovery and business continuity.
- Case Studies and Examples: Real-world examples of cyber-attacks on energy infrastructure.