



FOR CORPORATES/ORGANIZATIONS: "START THE JOURNEY OF BUSINESS TRANSFORMATION: DATA-DRIVEN AI-ENABLED"

virtual online | Duration 24 H

INSTRUCTOR PROFILES

Eng. Hisham Arafat Shehata

Hisham Arafat, Digital Transformation Lead Consultant, experienced Solutions Architect, Technology Strategist & Research. Engineer possess +23 years of professional engineering and information technology hands-on experience in leadership, technical and consulting roles. He is currently focusing on panning & implementing Digital Transformation solutions using Cloud Native, Distributed Systems, Mobility, Blockchains, Internet of Things (IoT), Data Science, Big Data, Analytics practices using open source as well as vendor-specific solutions and technologies. He is now engaged in developing solutions for Digital Cities, Supply Chain & Logistics optimization, Utilities, IoT, Connect Cars, Blockchain for enterprise customers globally. Working for multinational solutions leaders, he conducted +100 solid engagements for key customers across Middle East, Africa, Far East, Europe, Russia, South America and USA using enterprise class industry business solutions, applications and technologies. He has experience in diversity of vertical industries including Engineering & Construction, Industrial Manufacturing, Retail & Distribution, Oil & Gas, Utilities, Supply Chain & Logistics, FS, Transportation and Telecom, Government/PS/NGOs, Agriculture, Healthcare.

Hisham teaches academic postgrad courses in several universities and supervise researches in Agriculture and Bioinformatics from Big Data Analytics perspectives and directing the development of Big Data & Data Science program at Nile University. He is appointed as reviewer and mentor for incubated start-ups provides expertise in Lean, Agile Transformation, Scrum, Kanban, Nexus, LeSS and EBM specially for digital business platforms.

BUSINESS TRANSFORMATION USING DATA SCIENCE, BIG DATA ANALYTICS AND AI APPLICATIONS WORKSHOP

WHAT YOU WILL LEARN?

Data-Driven digital transformation can open unlimited boundaries of innovation, excellence and competitive edge for organizations through leveraging Big Data Analytics, Data Science and Artificial Intelligence (AI) revolution. This course provides business leaders and top management with deep understanding of Data Science, Big Data Analytics and AI as agents for strategic business transformation leveraging internal and external data assets. The course provides balanced business and technical perspectives to ensure acquiring knowledge needed for practical implementation of such transformation.

COURSE MAIN TOPICS

- Big Data, Data Science and AI Overview Through Use Cases .
- Organizational Drivers for Data-Driven Digital Transformation .
- Maturity Model for Data Driven Transformation .
- Practical Considerations for Data Science, Analytics and AI Applications .
- Technical Introduction to Data Science & AI Method and Applications .
- Technical Introduction to Big Data Platforms and Technologies .
- Use Cases for Deriving Business Value from Data-Driven Solutions .
- Planning and Managing Data-Driven Solutions Projects .
- Implementation Life Cycle and Lean Agile/DevOps Methods .
- Framing Business Challenges into Data-Driven Models .
- Forming Teams, Roles and Building Required Skills/Capacity .
- Organizational Models to Adapt Data-Driven Transformation .
- Driving Innovation, Design Thinking and Data Products Management .
- Transformational Strategies and Organizational Change Management .
- Hands-on Project: Use Case on Data-Driven Transformation .
- Course Conclusion and Next Steps .

Date

8 - 10

March, 2021

Course

Fee

300 JOD

Questions and Local Registration

For More Information And Registration From Jordan Please Contact

Eng. Amer Al Najjar Training Center Manager Mobile :

 **00962777399728**

Next Steps





DATA SCIENCE | BIG DATA ENGINEERING | ANALYTICS & AI APPLICATIONS IN PRACTICE WORKSHOP

virtual online | Duration 40 H

WHAT YOU WILL LEARN?

A practical hands-on jump-start in adopting real-life solutions using Big Data, Data Science, Analytics and AI Applications toward Data-Driven Digital Transformation of Organizations. The workshop starts with introducing the practice itself ensuring deep understanding technically and business-wise by removing ambiguity of such emerging domain. Trainees will apply knowledge and skills to a course project that goes alongside the topics to empower design thinking and implementation skills.

The workshop then introduced the trainees to how those emerging technologies, platforms and solutions are implemented in projects by demonstrating the lifecycle as well as common tasks carried out during each phase. The data science methods and techniques is contrasted by use cases explaining the relation between statistical modeling, machine learning and data mining. More solid understanding of Data-Driven AI-Enabled models are discussed to link those techniques by example.

Upon building solid understanding of Data Science Models, the discussion proceeds to implementing those models into Analytics and AI Applications to process Big Data both structured and unstructured. Several Big Data technologies are introduced with uses cases, patterns and examples. The course concludes by discussing how to make the last steps to finalize, operationalize and present your solution including planning Agile implementation to roll out to production .

Audiences: Technical/Leaders – Beginners to Intermediate .

COURSE MAIN TOPICS

Introduction: Big Data Analytics and AI Architecture, Practices and Use Cases

- Big Data: Practical Technical Overview .
- Attributes of Big Data solutions .
- Data Science and Artificial Intelligence (AI) Models .
- Digital Transformation and Internet of Things (IoT) .
- State of the Practice in Analytics .
- Big Data Analytics in Industry Verticals: Use Cases .
- Architectural Aspects of Real-life Solution .
- Project Introduction .
- Lab Practices .

Lifecycle and Implementation in Practice

- Introductions to Lean Agile and DevOps .
- Data Analytics Lifecycle .
- Discovery .
- Data Preparation .
- Model Planning .
- Model Building .
- Communicating Results .
- Operationalizing .
- Project Reflection .
- Lab Practices .

Data Science and AI Methods

- Introduction to Data Modeling .
- Tools: R/R Studio – Python – Other Tools .
- Types of Learning (Supervised – Unsupervised – Reinforcement) .
- Statistical Modeling and Visualizing the Data .
- Clustering & Association Rules .
- Regression Methods .
- Classification Methods .
- Recommenders .
- Markov Decision Processes .
- Text Mining and NLP .
- Deep Learning and Neural Nets .
- Project Reflection .
- Lab Practices .

Big Data Platforms and Technologies

- Challenges of Big Data: Structured, Unstructured and Streams .
- The Massively Parallel Processing Concepts .
- NoSQL Data Management Platforms .
- Hadoop HDFS and YARN .
- Data Ingestion and Ingestion Technologies .
- Working with Hive and HBase .
- Processing with Spark, Mllib and Spark Streaming .
- Processing Stream using Flink .
- Greenplum and MADLib .
- Deploying Real-Time Analytics and AI Models on Big Data Platforms .
- Project Reflection .
- Lab Practices .

Consulting and Solution Delivery

- Architecting Data-Driven AI Applications and SW Engineering .
- Cloud-Native Engineering: Microservices, Containers, CI and DevOps .
- Cloud-Based Architecture: AWS, Google, Azure and Others .
- Operationalizing Analytics and AI Solutions .
- Building End-To-End Projects using Big Data and AI Models .
- Applications Development Lifecycle and Creating Final Deliverables .
- Project Reflection and Finalization .
- Lab Practices .

Close-up and Final Review

Date

14 - 18
March, 2021

Course

Fee
500 JOD

Questions and Local Registration

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