BIG DATA SYMPOSIUM
AND THE OFFICIAL LAUNCH OF
M.SC. IN BIG DATA SCIENCE AND ANALYTICS
“THE NEW ECONOMY IS THE DATA ECONOMY”
APRIL 1, 2019
WYNDHAM GRAND HOTEL
KINGDOM OF BAHRAIN

LIVERPOOL JOHN Moores UNIVERSITY
This event is organized by the COLLEGE OF SCIENCE and the COLLEGE OF INFORMATION TECHNOLOGY at the UNIVERSITY OF BAHRAIN under the patronage of His Excellency Prof. Riyadh Yousif Hamzah, UOB president, and in partnership with LIVERPOOL JOHN MOORES UNIVERSITY (UK) to officially launch the M.Sc. in BIG DATA SCIENCE AND ANALYTICS.

The official launch of this unique program is complemented with a BIG DATA SYMPOSIUM to provide a rich platform for knowledge exchange through insights delivered by the leaders of the field of data. This event is a great opportunity for enhancing the positioning of the Kingdom of Bahrain as Technology Hub and as Educational Leader in the region.

Finally, the organizing team gratefully acknowledges the considerable efforts invested by many individuals from both universities to making this happen.
EVENT INFORMATION

FUNCTION ROOMS
Wyndham Grand Hotel Bahrain

REGISTRATION
Please register for the event, if not already registered, at the registration desk where you will receive the event pack.

MOBILE PHONES
Kindly switch your mobile phones to silent mode while you are in the symposium room. If you need to take a call then please do so outside the symposium room.

SOCIAL MEDIA
Please use the #BigDataBahrain.

This event uses slido.com for interactive Q&A

Please post questions to speakers at the convenience of your mobile device.

1. Go to your mobile browser and type slido.com
2. Enter event code: #BigData
3. Search for the event: Big Data Symposium 2019
4. Click “Ask” section to start posting your questions.
5. Click “Vote” section to poll on existing questions.
# AGENDA

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>08:30 – 09:00</td>
<td>REGISTRATION AND RECEPTION</td>
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<tr>
<td>09:00 - 09:10</td>
<td>Prof. Riyad Hamzah</td>
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<td>UOB President</td>
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<td>09:10 - 09:20</td>
<td>Prof. Paulo Lisboa</td>
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<td>Head of Department of Applied Mathematics, LJMU</td>
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<td>09:20 - 09:25</td>
<td>H.E. Mr. Simon Martin</td>
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<td>British Ambassador to the Kingdom of Bahrain</td>
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<td>09:25 - 09:30</td>
<td>H.E. Mr. Amin El Sharkawi</td>
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<td>Resident Coordinator for UN activities, Resident Representative for UNDP</td>
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<tr>
<td>09:30 - 09:40</td>
<td>Dr. Simon Galpin</td>
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<td>Managing Director, Bahrain Economic Development Board</td>
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<td>09:40 - 09:45</td>
<td>UOB and LJMU Signing Ceremony</td>
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<tr>
<td>09:45 – 10:15</td>
<td>Data Science for the Real world</td>
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<td>Prof. Paulo Lisboa</td>
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<td>Liverpool John Moores University</td>
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<td>10:15 – 10:45</td>
<td>COFFEE BREAK</td>
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<tr>
<td>10:45 – 11:15</td>
<td>Success Stories and Case Studies</td>
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<td>Mr. Shijaz Abdulla</td>
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<td>Amazon Web Services</td>
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<td>11:15 – 11:45</td>
<td>Data Economy and Society</td>
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<td>Prof. John Beaumont</td>
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<td>11:45 – 12:15</td>
<td>Big Data and Telecom - A Perspective</td>
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<td>Mr. Karan Ponnudurai</td>
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<td>Batelco Group, Bahrain</td>
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<td>12:15 – 12:45</td>
<td>Big Data Science in Healthcare</td>
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<td>Dr. Ivan Olier-Caparroso</td>
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<td>Liverpool John Moores University</td>
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<td>12:45 – 13:30</td>
<td>PANEL DISCUSSION: “BIG DATA THE BIG OPPORTUNITY”</td>
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<tr>
<td>13:30 - 14:30</td>
<td>CLOSING REMARKS AND LUNCH</td>
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OPENING SESSION

PROF. RIYADH HAMZAH
UOB president

PROF. PAULO LISBOA
Head of Department of Applied Mathematics, LJMU

H.E. SIMON MARTIN
British Ambassador to the Kingdom of Bahrain

H.E. MR. AMIN EL SHARKAWI
Resident Coordinator for UN activities, Resident Representative for UNDP

DR. SIMON GALPIN
EDB Managing Director
Prof. Paulo Lisboa is the Head of Department of Applied Mathematics at Liverpool John Moores University. His research focus is advanced data analysis for decision support, in particular with applications to personalized medicine, public health, sports analytics and digital marketing. His research group on data science has developed rigorous methodologies for interpretable machine learning, to enable validation by subject experts.

In 2017 he was appointed Head of the Engineering and Technology Research Institute with oversight of research strategy across the Faculty of Engineering and Technology (FET) and Project Director for LCR Activate - lcractivate.co.uk - a ERDF funded £5m project to accelerate the development of SMEs in the Digital Creative Sectors in the Liverpool City Region (LCR).

He is past chair of the Horizon 2020 Expert Advisory Group for Societal Challenge 1: Health, Demographic Change and Wellbeing, providing scientific advice to one of the world’s largest coordinated research programs in health.

Professor Lisboa is member of Council for the Institute of Mathematics and its Applications and co-chairs two Task Forces in the Data Mining Technical Committee of the IEEE, on Medical Data Analysis and on Explainable Machine Learning. He is past chair of the JA Lodge Prize Committee and chair of the Healthcare Technologies Professional Network in the Institution of Engineering & Technology and has extensive experience in editorial and peer review roles in a number of journals and research funding bodies nationally and internationally. He has more than 250 peer reviewed publications and he edited the first ever book on applications of neural networks that has been published in 1992.

MR. SHIJAZ ABDULLA

Shijaz Abdulla leads the Public Sector Solutions Architecture team across the Middle East and North Africa (MENA) for Amazon Web Services. His team helps governments, educational institutions and non-profits build innovative solutions on the cloud. With 14 years of tech experience in the region, Shijaz holds an engineering degree in Information Technology. He is also a tech blogger and an AI enthusiast.
PROF. JOHN BEAUMONT

John Beaumont, formally Professor of both Management (University of Bath) and Information Systems (University of Stirling), has been a successful international business executive for over 30 years including roles as an Executive Director of a FTSE100 company (Energis plc), a CEO of a LSE-listed company (QA plc), and a public sector Managing Partner in a global management and technology consulting practice (BearingPoint).

As a Consultant at Coopers & Lybrand (London and New York), John worked on a number of strategic and regulatory projects, including the divestiture of AT&T and the privatisation of British Telecom. John has held numerous Non-Executive roles (in the UK’s Office for National Statistics, and in several technology-based start-ups, including European Telecommunications and Technology, WorldPay, and Novia Financial (with over £6 billion of assets under management)); John had the day-to-day lead responsibility in a successful LSE and NASDAQ $1 billion flotation. John was a member of the UK’s Economic and Social Research Council, and is the author of 6 books and over 50 refereed papers.

MR. KARAN PONNUDURAI

Karan is the Group Chief Digital Officer at the Batelco Group, responsible for the execution of digital businesses across a worldwide footprint. Previously he helped establish Axiata Digital as the Chief Strategy and Innovation Officer where he built leading E-Commerce, Digital Advertising, Money and API platform businesses throughout Asia.

Karan was the Vice President of Business Development and Technology for Softbank Emerging Markets, a venture capital initiative between Softbank and the World Bank. He holds degrees in Electrical Engineering from the University of Malaya, where he was a Hewlett Packard scholarship holder and Stanford University, USA where he was a Krupp Foundation Fellow. He completed the General Management Program at INSEAD.

DR. IVAN OLIER-CAPARROSO

Dr. Ivan Olier is Senior Lecturer in Data Science of the Department of Applied Mathematics of the Liverpool John Moores University (LJMU). He holds a Ph.D. in Artificial Intelligence from the Technical University of Catalonia, Spain. Before joining LJMU, he worked as Data Science researcher at the Autonomous University of Barcelona and at the University of Manchester, followed by lectureships in Health Informatics at the University of Keele and in Data Science at Manchester Metropolitan University. Dr. Olier’s expertise is in machine learning and data science, with a particular focus on applications for healthcare. His research work has been published in more than 60 peer-reviewed manuscripts in areas such as machine learning, biostatistics, bioinformatics, biomedicine, and databases. Since 2018, Dr. Olier is the Link Tutor between LJMU and the University of Bahrain.
MODERATOR

DR. PAUL MCGOLPIN

Paul is an internationally experienced Senior Executive in the Technology Services sector. Starting his career with IBM, he has held Senior Executive positions at several Global Technology Services firms including Cambridge Technology Partners and SapientNitro. He has executive leadership experience in UK, US and India. Over the last 10 years he has specialised in company turnarounds and startups. He has led and implemented three successful company turnarounds in the IT services sector and two startup ventures. Paul holds an MBA in International Business from Bradford School of Management and a PhD in Information Systems Strategy from Cranfield School of Management. He is a co-author of a book on IT Strategy and 5 academic articles.

PANELISTS

DR. SAWSAN HILAL

Dr. Sawsan Hilal is Assistant Professor at Department of Mathematics, University of Bahrain. She holds a Ph.D. in statistics and M.Res. from Lancaster University (UK) and M.Sc. in mathematics from University of Bahrain. She also holds PCAP as a professional certificate awarded by York St John University (UK). Her research interest covers Extreme Value Theory, Financial Risk Management, Econometrics & Financial Time Series Analysis, Data Analysis, Statistical Modeling, Statistical Inference, and Statistical Applications. Dr. Sawsan is the coordinator of the M.Sc. in Big Data Science and Analytics. She had a wide range of academic activities including giving a series of learning workshops to the university students. Dr. Sawsan is VIWA 2018 Award Winner under the category of “Distinguished Woman in Science – Statistics” by Venus International Foundation, India.
DR. OMAR AL UBAYDALI

Omar is the Acting Director of Research at Derasat, Bahrain, an affiliated associate professor of economics at George Mason University, and an affiliated senior research fellow at the Mercatus Center. Omar’s research interests include political economy, experimental economics, and the economics of the GCC countries. He previously served as a member of the Commonwealth of Virginia’s Joint Advisory Board of Economists and a Visiting Professor of Economics at the University of Chicago. Omar regularly publishes his research in international peer-reviewed academic journals, and his mainstream media articles appear in Arabic and English-language newspapers and blogs such as AlHayat, The National, Forbes Opinion, and US News. Omar earned his BA in economics from the University of Cambridge, and his MA and PhD in economics from the University of Chicago.

MR. AHMED JANAHI

Ahmed has established himself as a leading figure in the training and consultancy sector and for lending a leading voice in the fast emerging management training industry. He has excelled by pioneering and introducing innovative and insightful concepts to the training methods of many training schools across Bahrain and the Gulf region. As a co-founder and the Manager of Projects and Operations for “HERA” Consultancy and Events, his responsibilities included overseeing day-to-day operations, and supervising the process of creating, planning, and implementing the consultancy/training products and events, and has worked as well on establishing the first Leadership Academy in the region based on experiential training style. Ahmed was also a recruitment consultant to one of the international HR firms and a business development consultant to another, a member of the Investment Review Committee (IRC) of the Trade Quest with the Bahrain Bourse, a lecturer in different topics related to interpersonal skills, self-development, working with youth, economics and investment, and he is the founder of the Stock Exchange Challenge (SEC) which was adopted by the University of Bahrain and for several years, and is currently one of the additional subjects for high school students in Bahrain. Ahmed is currently a Manager at Tamkeen and holds a Bachelor’s degree in Economics and Finance from the University of Bahrain.

MS. MARWA ALESKAFI

Marwa is the Head of Program in Brinc MENA. She runs the IoT accelerator program, currently in its third cohort. She is a strategy economist and sector expert with a background in formulating national level strategies. Marwa is experienced in driving economic policy, launching development programs, investment promotion, macro-economic modeling, personnel and project management as well as market intelligence and assessments for business development.
MS. LAMYSE AMMAR

Lamyse is an experienced and diligent tech individual with a proven track record with over 14 years of experience in technology, luxury brands, pharmaceuticals and real estate. She believes building relationships and doing the right thing matters, with these set of values she has been able to add to her credibility and achieve what was required from her and more.

As a senior person for LinkedIn on the Gulf market (Bahrain, Oman, Kuwait and Qatar), Lamyse empowers companies to help in creating an economic opportunity for our Gulf members. Lamyse is currently working with major companies in the region to with leveraging the LinkedIn data and insights that will help them assist in their talent acquisition strategy and empower their employer branding. An avid advocate for women empowerment, her recent passions as VP of the CWIT have become giving back and helping women showcase what they should offer to the world and that they are capable of doing anything they want when they put their mind to it. Lamyse holds a BS in Computer Science from the Lebanese American University.

The Jobs Landscape in 2022

Top 10 Emerging
1. Data Analysts and Scientists
2. AI and Machine Learning Specialists
3. General and Operations Managers
4. Software and Applications Developers and Analysts
5. Sales and Marketing Professionals
6. Big Data Specialists
7. Digital Transformation Specialists
8. New Technology Specialists
9. Organisational Development Specialists
10. Information Technology Services

Top 10 Declining
1. Data Entry Clerks
2. Accounting, Bookkeeping and Payroll Clerks
3. Administrative and Executive Secretaries
4. Assembly and Factory Workers
5. Client Information and Customer Service Workers
6. Business Services and Administration Managers
7. Accountants and Auditors
8. Material-Recording and Stock-Keeping Clerks
9. General and Operations Managers
10. Postal Service Clerks
Data is at the heart of the latest IT transformational wave. Here are the 5 major technologies shaping new interconnected data-driven reality.

**Blockchain & Distributed Ledger**
A distributed ledger eliminates a single source of failure within the ecosystem, protecting data from tampering. Blockchain enables a device to have autonomy, individual identification and secures integrity of data. It supports peer to peer communication by removing technical bottlenecks and inefficiencies.

**Internet of Things**
The interconnection of computing devices embedded in everyday objects via internet, enables them communicate with each other; sensors generate data that is sent downstream to subsequent layers of the architecture, enabling “Things” in IoT.

**Cloud**
By embracing cloud, businesses modernize their IT infrastructure, creating in-built security, increasing agility, reducing costs & enabling continuous adaptation while focusing on innovation and gaining the competitive edge.

**5G**
5G brings new aspects to the connectivity table: greater speed & volumes, lower latency, and the ability to connect a lot more devices at once. Essentially this enables easy data transfer at higher speeds and seamless connectivity of devices & sensors. The application use cases are endless.

**Artificial Intelligence**
AI systems can process and analyse large data sets, enabling better, faster and even automated decision making in real time enabling people & business to gain access to services & experiences never attainable before.