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The Global BIG DATA Analytics In Power & Utilities Industry Forum

20-21-22 November 2024, Amsterdam

INTRODUCTION

The Global BIG DATA Analytics In Power & Utilities Industry Forum is a conference or summit that brings together experts, professionals, and stakeholders in the power and utilities industry to discuss the latest trends, developments, and innovations in big data analytics. The forum typically covers a range of topics, including data management, analytics, visualization, artificial intelligence, and machine learning, as they relate to the power and utilities sector. The objective of the forum is to share insights, best practices, and practical strategies to help organizations in the industry harness the power of big data to optimize their operations, improve efficiency, reduce costs, and enhance customer experience.

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DAY 1

Wednesday 20th November 2024

09.00 Opening address from the Chair

09.10 - Lessons from building a large scale predictive maintenance system in-house

- Getting the data into shape
- Using machine learning, opportunities and challenges
- Scaling and deploying

Kristofer Jakobson
Senior Data Scientist
Fortum

09.50 -Designing and implementing data and AI strategy to enable energy transition

- Data and AI challenges
- Designing a fit-for-purpose and synergistic data & AI strategy
- Implementation and lessons learnt

Aatish Kumar
Program Lead Data & AI
Eneco

10.30 - Opportunity to learn about the sponsor solutions, interactive networking session and coffee break

11.00 - Digital security issues in the industrial Operational Technologies

- Evolution for the sector : new threats new risks over the years
- Global approach to prevent, protect, detect, defend
- What about the combined attacks (digital + physical) and the lessons from the European project

Frédéric Guyomard
Project Director
EDF

11.40 - Multidisciplinary digital twin technology for safety-critical systems in the energy transition

- The framework of multidisciplinary digital twinning
- Bayesian networks for risk prediction using real-world data
- Hazard identification through deep machine learning of data behaviours
- Innovative safety management based on the dynamic risk predicted
- Digital twin applications in energy transition
- Explainable AI in digital twinning

Dr. HenryTan
Senior Lecturer
University of Aberdeen

12.20 - Lunch

13.30 - AI and use cases of AI

- AI Act and strategies
- Hurdles of Community building for Data projects
- Communication of Data driven projects

Michael Freidl
Head of Data Lab
University of Graz

14.10 - Driving grid innovation projects under increased regulatory pressure, intense cybersecurity threat and rapidly rising demand for renewables integration

Dr. Kamal Radi
Senior Specialist – Power Systems Planning, SCADA and Energy Management Systems (EMS)**ESB**

14.50 - Opportunity to learn about the sponsor solutions, interactive networking session and coffee break

15.20 - Moving from Continuous Improvements to a Well of Wisdom

Egil Nybakk
Vice President Projects
Aker BP

16.00 Topic TBA

Angela MacOscar
Head of Innovation
Northumbrian Water Group

16.40 End of Day One – Closing word from the Chairman

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DAY 2

Thursday 21st November 2024

09.00 Opening address from the Chair

OPENING ADDRESS

09.10 - A focus on Master Data Management

Andreas Tagkalakis
Department Manager - Global Master Data Management
OMV

09. 50How AI can help to develop and optimize renewable power plants in merchant power markets

- Renewables in the context of power market canalization – driving new optimization KPIs into the industry
- Power output optimization across Wind, Solar, and Hybrids
- Integration across multiple power offtake strategies

Daniel Luecht
Founder & CEO
NASH Renewables GmbH

10.30 - Opportunity to learn about the sponsor solutions, interactive networking session and coffee break

11.00 - AI PowerPlay: Building High-Impact Teams & Transformative Solutions

With the rise of GenAI, there is now the challenge that we as data and AI leaders need to manage the high (and sometimes unrealistic) expectations towards AI. We need to find the right people and enable them to create real business value with data and AI, avoiding the risk of potential disappointment. It's about focusing on the relevant profiles and providing an environment where they can succeed. And in the end we can also use GenAI to support us with this challenge.

Kira Engelhardt
Lead Data Scientist
E.ON

11.40 - Topic TBA

Sebastian Gjertsen Data Scientist
Statkraft

12.20 - Lunch

13.30 - Generative AI: where to start? A case study

Identifying generative AI opportunities within the company by engaging cross-functional teams and stakeholders, ensuring a wide-ranging exploration of potential applications.
Evaluating use cases based on impact, feasibility, and strategic alignment, using criteria such as ROI and technological readiness to prioritize effectively.
Selecting few projects for initial implementation, utilizing pilot tests and stakeholder consensus to guide resource allocation and iterative development.

Achille Sassi
AI Innovation Lead
a2a

14.10 - Leveling up AI - From fundamental research to real-world impact

Why is AI so important, not just for Alliander, but for the energy sector as a whole?
The building blocks for an AI Research Program
How to level up along the technology readiness levels from fundamental research to production ready applications?

Luc Nies
Principal Researcher of AI for the Digital DSO programme
Alliander

14.50 - Opportunity to learn about the sponsor solutions, interactive networking session and coffee break

15.20 - Quantum Computing in the Power & Utilities Sector – Visions for tomorrow, realities of today

- Overview of Quantum Computing: what is it? How does it work? Key advantages over classical computing
- Role of Quantum Computing in the P & U Sector: potential use cases in energy distribution, demand prediction, pricing, ...
- Current state of quantum computing/ exploration of these use cases: what is possible today, what is the expected timeline to scale?
- Actions to take: when and how to start with quantum computing?

Dr. Barbara Wellmann
Lead Quantum.Link
Deloitte

16.00 END OF THE SECOND DAY, CLOSING WORD FROM THE CHAIR

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DAY 3

Friday 22nd November 2024

09.00 Opening address from the Chair

OPENING ADDRESS

09.10 - Data collection and utilisation in the energy transition

Bjarne Karlsen
Senior Business Developer
Glitre Nett AS

09. 50 Case Helen: Data & AI powered energy company

- Enabling digital customer interaction and participation to the energy ecosystem
- Data and AI driven automated and distributed energy system
- AI as a colleague

Mikko Muurinen
Head of Data & AI
Helen

10.30 - Opportunity to learn about the sponsor solutions, interactive networking session and coffee break

11.00 - From hype to real value – creating robust and trustworthy AI solutions

- Digitalization and AI as enablers for the energy transition
- Lessons learned from energy companies, technology providers and platform suppliers
- Robustness as key for increased return of investment and operational efficiency

Kjell Eriksson
Vice President - Digital Partnering
DNV

11.40 - Data-Intensive System of Systems

Systems Thinking
System of systems
Data-Intensive Digital Ecosystems

Bedir Tekinerdogan
Chair Information Technology
Wageningen University & Research

12.20 - Lunch

13.30 - The definition and the specification of data products for the TSO world

Data and data integration needs at Elia and 50Hertz
What's a data product, how this supports our needs? how to describe it and specify them for the usage.
Defining Data contracts for the consumption of the products.
The data platform that support these data products, capabilities and architecture.

Florent Jochaud
Data platform architect
50Hertz Transmission GmbH

14.10 - Powering the Future with Big Data: Legal, Risk, and Contract Strategies

Joseph Otoo
Senior Legal Counsel
Arup

14.50 - Opportunity to learn about the sponsor solutions, interactive networking session and coffee break

15.20 Using Big Data to enable Electrification of Motorway Services

One of the key focus areas of distribution network operators and distribution system operators is to ensure they enable the transition to Net Zero. If drivers cannot charge quickly on the largest roads this has the potential to block the uptake of electric vehicles.
UK Power Networks has been leading the way to install more capacity across motorway service areas within its region (London, the South East and the East of England), but how can we use data to drive insights into how much power may be needed in the future.
This presentation will talk through the data analysis carried out to ensure we plan for enough power, ensuring we right size capacity needs and install them just in time.

Luke Hughes
Head of Network Planning for London and region
UK Power Networks

15.50 Topic TBA

Marina Sverdel
Head of Digital Strategy
RWE

16.30 END OF THE FORUM