7th Global Conference on
DATA SCIENCE AND MACHINE LEARNING
December 13, 2022 | Webinar

Received date: 09-08-2022 | Accepted date: 16-08-2022 | Published date: 20-12-2022

Building a unified data network

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Why is it so hard for most 'normal' organizations to get their AI projects to do anything that impacts their bottom line? The truth is that behind every cleaver algorithm is a mass of highly processed data and to answer this question we must understand the 'forces' that drive AI adoption and then provide an 'architectural template' that any organisation can adopt.

This talk attempts do that in three sections:

(A) Firstly, it defines the three 'fundamental forces' that enable AI as:

DATA: data that contains greater variety, arriving in increasing volume with more velocity.

CLOUD: networked computing facilities that facilitates remote data storage and processing services via the internet.

AI: computer systems perform tasks normally requiring human intelligence.

(B) Secondly, it demonstrates how each 'force' can be modeled as a network: Networks of graph-shaped data; networks of computers in the cloud; networks of teams cooperating in a data mesh; and networks of artificial neurons in ML models.

(C) Finally, it attempts to provide a 'unified theory' where we merge the three networks into one. Making each node in the network as a data point in a graph, and a network address in the cloud, and a neuron in an AI model all at the same time.

The ideas expressed are not novel but rather attempt to provide clarity and pragmatism over existing academic work.

Recent Publications

1. Embrace Complexity (Part 1): Why all organisations should build internal networks to survive in an increasingly technological world?
2. Embrace Complexity (Part 2 Data): How to network-ify your organisation in three simple(ish) steps … starting with data?
3. Embrace Complexity — Part 3: Cloud: How to connect data in a decentralised private cloud?

Biography

Tony Seale is a senior developer with hands-on experience of building distributed Knowledge Graphs for investment banks. He uses this real-world experience to provide grounded thought leadership to the wider community on the role that Knowledge Graphs can play in accelerating AI adoption.

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