



## Digital twin technology for complex industrial processes

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### Abstract:

With ever accessible sensors, cheaper processing power, it has become possible to capture entire business processes in a digital replica. A digital replica enables rapid design, and verification in a safe, cost effective manner without committing too much capital to physical manifestations. Such a capability to virtually verify processes and products have existed in various forms at various levels of fidelity in industries such as manufacturing and logistics. This talk highlights the state of art in digital twin technology to accelerate verified design, visualise and communicate planned outcomes, in new manufacturing and logistics operations such as battery disassembly and complex logistics operations.

### Biography:

Chinemelu Ezeh has completed his PhD in Assistive Robotics at the age of 26 years from University College London. He is the director of Amatou Robotics, a company designing digital twin technology for easier automation of logistics operations.

### Publication of speakers:

1. Chinemelu Ezeh, Azithromycin and Diminazene Aceturate Combination Therapy in Experimental



Multidrug-resistant *Trypanosoma brucei brucei* Infection in Albino Rats, *Veterinary Parasitology*, Volume 282, June 2020, 109138

2. Chinemelu Ezeh, Correlation between building characteristics and associated energy consumption: Prototyping low-rise office buildings in Shanghai, *Energy and Buildings*, Volume 217, 15 June 2020, 109959
3. Chinemelu Ezeh, On the notch fatigue strength of additively manufactured polylactide (PLA), *International Journal of Fatigue*, Volume 136, July 2020, 105583
4. Chinemelu Ezeh, Why sub-Saharan Africa might exceed its projected population size by 2100, *The Lancet*, Available online 14 July 2020, In Press, Corrected Proof What are Corrected Proof articles?