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Fusionex and IMU integrate Big Data Analytics with AI

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Pioneering the country's first AI-powered medical R&D



Multi-award-winning data technology provider, Fusionex, and Malaysia's pioneer private medical and health sciences university, the International Medical University (IMU) are taking a bold step to integrate Big Data Analytics (BDA) and Artificial Intelligence (AI) in IMU's medical and health sciences programs. In order to equip future healthcare providers with the right set of skills and knowledge, this collaboration will see five IMU undergraduate programmes each piloting a BDA module.

The five programmes are Bachelor of Pharmacy (Hons), BSc (Hons) in Medical Biotechnology, BSc (Hons) in Dietetics with Nutrition, BSc (Hons) in Nutrition, and BSc (Hons) in Biomedical Science. These will be some of the first non-ICT degree programmes to integrate BDA as part of its syllabus.

In order to meet the future technological needs of the industry, Fusionex will be utilising its AI and BDA platform, Fusionex GIANT, to be incorporated within the programmes offered by IMU.

These programmes will provide four outcomes: an overview of the analytics life cycle, how analytics is contributing to the healthcare industry, why making data-driven decisions is key for an organization, and effectively using analytical and AI skills in solving healthcare-related problems.

Fusionex and IMU have also expressed commitment to integrating the technology and medical fields with the exchange of a Memorandum of Agreement (MoA). The MoA was exchanged by IMU Deputy Vice-Chancellor Professor Peter Pook and Fusionex Founder & Group CEO Dato' Seri Ivan Teh during the Healthcare Big Data Analytics Forum.

The forum was held at the IMU campus and was jointly organised by IMU, the Malaysia Digital Economy Corporation (MDEC), and Fusionex.

The MoA sees both parties leveraging on their respective strengths – Fusionex utilising BDA and AI, and IMU lending its expertise and knowledge in the healthcare industry – to work together on various aspects of medical Research &

Development (R&D) including cancer informatics, advanced drugs, vaccine design, and healthcare analytics.

In order to construct a self-learning AI project, the program needs to be fed with billions of data points. Only with such extensive training can an AI start to visualize, diagnose, test, and predict medical outcomes intelligently, with speed and precision.

To achieve this, the GIANT platform connects to the IMU data points, consolidates, and analyses the data through its AI technology to unearth patterns and trends, and generate valuable insights for the IMU R&D team to utilise. These insights offer benefits that cannot be quantified in value, including reducing the diagnosis and treatment periods for patients and making breakthroughs in medical research, ultimately saving lives. Even unstructured data outside the university including new medicines on the market and their effects, or new discoveries and announcements by the Ministry of Health or World Health Organization, can be compiled and fed into the AI engine in furtherance of IMU's R&D efforts.

As part of the partnership under the MoA, the research teams from IMU will also be equipped with knowledge on BDA and AI, especially on how to most effectively use GIANT, including finding patterns within data and analysing the insights derived from such data. Fusionex trainers, data scientists, and subject matter experts will be on hand to educate and assist IMU to manage the technology provided to attain BDA and AI readiness.

Dato' Seri Ivan Teh, Fusionex Founder and Group CEO, said: "We are excited to be pioneering this AI-powered medical research initiative together with IMU. Their farsightedness in transforming their medical education and research to become data analytics ready and AI-driven is commendable. The Fusionex team will work towards improving medical education and research to advance the medical industry and healthcare as a whole."

"It has always been IMU's focus to be an innovative global centre of excellence in learning and research, which is why we are always ready to team up with experts in the field of technology – particularly in Big Data Analytics (BDA) and Artificial Intelligence (AI) – like Fusionex. This is the direction that healthcare is heading towards, and it is of utmost importance to IMU to future-ready our students in this field so that they are fully equipped to take on the future of healthcare upon graduation. I am excited to see where this collaboration with Fusionex will take us and how it can be extended to other programs in the future to benefit our students," said Professor Abdul Aziz Baba, Vice-Chancellor and CEO of IMU.

Photo caption: Fusionex Founder & Group CEO Dato' Seri Ivan Teh (left) exchanging a Memorandum of Agreement with International Medical University (IMU) Deputy Vice Chancellor Professor Peter Pook during the Healthcare Big Data Analytics Forum held at IMU Campus. (Photo: Business Wire)