

RUN LEARNING AND TEACHING AWARDS 2023

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Institution: CQUniversity

Title: Virtual Labs for Ubiquitous Hands-on Learning in Emerging Technologies

Application Category: Innovation and Learning

Abstract: In response to the surging industry demand for expertise in emerging technologies, we've embarked on a transformative journey to reshape hands-on education in Australia. Our innovation, the Virtual Laboratory Environment (VLE), is a beacon of change, eliminating access barriers and championing inclusivity. The VLE transcends conventional limitations, allowing students to explore and excel in emerging technologies, including Internet of things (IoT), cloud computing, and Artificial Intelligence (AI).

Through the VLE, lab exercises are easily accessible with just an internet connection. Students immerse themselves in the heart of this dynamic field, transcending geographic and circumstantial boundaries. These labs provide hands-on experiences and project-based assessments that inspire creativity and meticulously prepare students for future careers by aligning learning theories with cutting-edge resources.

The profound impact of our Virtual Emerging Technology Labs is unmistakable, reflected in higher satisfaction rates and the positive feedback of both students and educators. This VLE is transferrable, which enables us to successfully expand this innovative approach university-wide, enhancing the student experience across various subjects.

In summary, the labs designed in the VLE work as revolutionary catalysts in ICT education at CQUniversity, propelling students toward an innovative and excellent future in emerging technologies, encompassing IoT, cloud computing, and AI.