**MARVIN – A 3D Printed, Internet Enabled Product Design and Staff Development Project**

We are in need of an increasingly highly skilled workforce with lots of high tech jobs being created while manual and low skilled jobs are in long term, and possibly permanent recession - due in no small part to automation, robotics and the proliferation of information and communication technologies. This wide context has clear implications for the professional development of teaching staff and practice in higher education, as the sector plays a pivotal role in developing our highly skilled workforce. It is vital to keep higher education learning and teaching current and relevant to developing learners that can take advantage of the new highly skilled jobs market place.

With the above points in mind I would like to present a project and paper at the MiTE conference in January 2019.

The project is a 3D Printed Internet Enabled product design that was constructed as part of a staff development exercise aimed at preparing Masters Degree qualified lecturing staff to deliver two Interdisciplinary Master Degree Modules under my supervision. The project brings together basic electronic design; microcontroller unit programming, 3D product design and 3D printing culminating in the realisation of a 3D printed, Internet Enabled, mobile technologies product destined for the Internet of Things market place.

The said staff development exercise and project construction were successful and the interdisciplinary staff team are now teaching these modules. The project constitutes an example of exciting ways of incorporating professional development activities in education with mobile technologies and creative media practice.