

EXPERT PROFILE

PROF. TS. DR. MANJIT SINGH SIDHU

- Position: Professor College of Computing & Informatics UNITEN
- Years of professional experience: 24 years
- Research Centre: Institute of Informatics and Computing in Energy (IICE)
- **Research Forte:** Engineering, Green energy and alternative renewable energy, energy efficiency and environment conservation



EDUCATIONAL BACKGROUND

- PhD in Multimedia @ Universiti Malaya
- Master of Science (IT) @ Universiti Putra Malaysia
- Bachelor of Science (Hons) (Comp. Sci.) University of Wolverhampton @ Wolverhampton, UK



PROFESSIONAL EXPERIENCE

Prof. Ts. Dr. Manjit Singh Sidhu has 20 years working experience in ICT particularly in developing problem solving software tools using various technologies for engineering education in UNITEN, Malaysia. His professional memberships include, a Chartered IT professional Fellow of the British Computer Society, Fellow of Malaysian Scientific Association, Senior IEEE member, and member of the Malaysian National Computer Confederation. He has been also working as a systems supporter and software Programmer at software houses in Malaysia for 1 year. His tenure at UNITEN brought about many improvements in the development of engineering problem solving software through creativity and empirical research, especially for mechanical engineering. His knowledge and experience have been put together in various projects, at Universiti Tenaga Nasional, including the development of Technology Assisted Problem Solving Packages for Engineering Education E-Science funded projects.

Apart from the above, he has contributed actively in teaching, training to UNITEN and consultancy service to ICT industry, including Tenaga Nasional Berhad. He has several copyrights and patents including international patent on a Technology Assisted Problem Solving System and Method. The indigenous technology is currently being extended to other areas, tested and commercialized. Currently, he has been actively pursuing research on RFID-IOT based product supply management solution maintaining and updating assets in particular, smart AR based and flip learning for engineering education. Prof. Ts. Dr. Manjit is the leader in RFID-IOT 18 month project in which an asset tracking system is being designed to enhance the tracking proses of switchgear assets.

KEY PROJECT HIGHLIGHTS:

- Development of a Computer Augmented Reality Engineering Mechanics Learning System (CAREMeLS). E-Science Fund - 2010
- A Novel Design of Touch to Print Augmented Reality Interaction Techniques for Simulating and Visualizing Engineering Concepts. E-Science Fund - 2014
- RFID-IOT - (Internet of Thing) Based Product Supply Management Solution Maintaining and Updating TNB Asset on ISCM Supply Chain Management Reliability Centered Maintenance Framework for Hydropower Plant, EVN, Vietnam - 2019