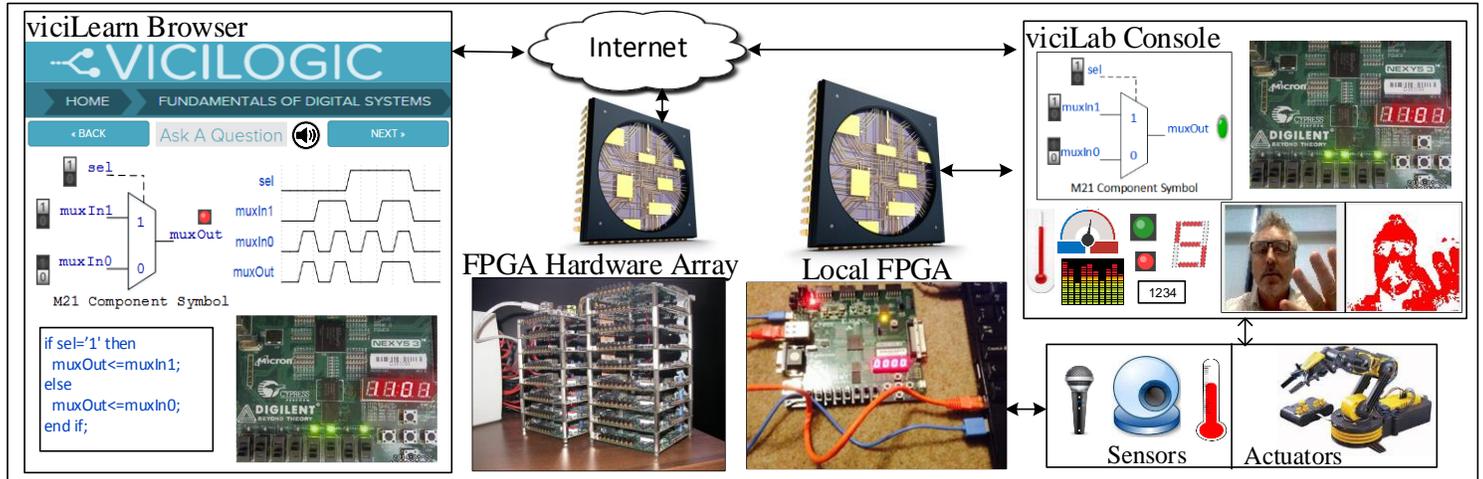# viciLogic: Making Integrated Circuit Design Accessible and Achievable

viciLearn online learning/assessment

- [viciLogic](#) homepage, registration, video overview, course links

- Use the viciLogic technology enhanced learning platform to follow hands-on self-paced and assessed courses in digital systems design and implementation

- Interact transparently with a remote FPGA, automatically probing design internal signals

- User interactive control and animation of component block diagrams, timing diagrams, state machines and truth tables to enhance learning, and perform automatic knowledge checks.

- Versatile course creator enabling development of collaborative, gold-standard, online courses in digital systems, integrated circuit (IC) design, computer architectures and Multi-Processor Systems on Chip (MPSoC) applications.

- Supports the flipped classroom model.

- Design-based, workshops using modern IC design techniques, CAD tools and FPGA technology.

- Animates/controls/probes inside remote FPGA hardware in the Cloud. Real time signals animate and visualise views of the operating hardware, to enhance learning.

- "Ask a Question" facility provided in each course step; building a community of support and knowledge.

- Modern Field Programmable Gate Arrays (FPGAs): contain up to one million logic cells, supporting massive parallelism and ultra-high performance systems

viciLab prototyping/GUI creation

- [viciLab demo videos](#)

- [viciLab download and quickstart video guides](#)

- Prototype and animate every synthesisable HDL model you have ever created.

- Rapid prototyping of FPGA hardware in the Cloud (or local), and Graphical User Interface (GUI) creation, for interactive animations of user designs and signals at any level of the integrated circuit design hierarchy.

- Integrates industry-standard Electronic Design Automation (EDA) CAD tools.

- Develop comprehensive embedded systems, using python-based integration of remote FPGA with remote (or local) sensors and actuators.

- Supports collaborative projects.

- Supports automated hardware test

- Reduce lab hardware cost/admin, using scalable remote hardware array

- viciLogic is not a simulator. simulators used for teaching digital systems offer limited functionality, and do not support industry-level IC design and implementation.

Stats

- viciLogic used in 15 courses since 2012, with >50,000 interactions with remote hardware.

- viciLogic [publications](#)

- User-progress analytics and user/group admin

Build the most powerful hardware imaginable

Contact Fearghal Morgan, Ph.D
fearghal@vicilogic.com, +353 86 3585544
https://ie.linkedin.com/in/fearghalmorgan