SCIENGLAB – AN EDUCATIONAL VIRTUAL LABORATORY

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SCIENGLAB is an internet based educational site of the Department of Electrical and Computer Engineering of the University of Calgary in Alberta, Canada. It comprises study cases for design projects of the fourth year students and a remotely controlled instrumentation laboratory. One of the design projects which has been developed over the years and stands as example for other projects is a complete design description of a traffic light with an exhaustive documentation, logic components, computer visualization simulation and a recently added cost optimized voice synthesis application.

The remote control instrumentation laboratory of the Department of Electrical and Computer Engineering of the University of Calgary is its first contribution to two international projects on remote control and teleoperation. The site comprises all modern laboratory (undergraduate) components of the department, with a remote control operated instrumentation laboratory, SelfLab@Home.

The students are invited to take a virtual visit of the laboratory rooms in which they will perform course required experiments in order to easier locate the devices to be used as well as operate them appropriately.

Twelve students in the fourth year of the Electrical, Computer and Software Engineering programs of the University of Calgary have been involved in the multi-step self-educational process of the SelfLab@Home project and we describe the details and the procedure involved in this process.

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