



**Project funded by the EU Lifelong Learning Programme  
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## SALEIE Student Project in Assistive Technology Project 12

<b>Project Supervisor:</b>	Assoc. Prof. Mihai MUNTEANU	<b>SALEIE partner:</b>	Technical University of Cluj-Napoca
<b>Project Title:</b> Human-Computer Interface based on Electrooculogram signals			
<b>Project duration:</b>	2 semesters	<b>Project level:</b>	Final year (year 4) undergraduate project
<b>ECTS credits (if applicable):</b>	12 (2, 6 credit modules)	<b>Prerequisite requirements:</b>	Completion of year 3 of study programme
<b>Course Suitability:</b>	Bachelor of Engineering in Electrical Engineering/Biomedical Engineering		
<b>Project Description:</b>			
<p>The purpose of the study is to design and implement a human-machine interface based on electrooculogram signals (EOG). The main feature of the interface is to improve the communication between people with disabilities and those around them. A series of experiments have to be performed using two measurement systems: Vernier LabPro® and KL-72001 BIOMEDICAL MEASUREMENT SYSTEM in conjunction with the electrooculogram module KL-75003 ELECTROOCULOGRAM EOG MODULE. The signals have to be processed and analyzed in LabVIEW. The same software will be used for designing the interface controlled by the acquired signals.</p> <p>This project links into the active <i>EU Lifelong Learning Programme "SALEIE"</i> (Strategic <b>AL</b>ignment of <b>E</b>lectrical and <b>I</b>nformation <b>E</b>ngineering in European Higher Education Institutions) and the work will be aligned to the area of assistive technologies to support students with disabilities.</p>			

The project descriptions are provided and also the contact details of the project proposer for more information or to discuss potential collaboration. These project descriptions are provided as ideas for other institutions to develop projects in assistive technology. If you want to refer to these project ideas, we would ask that you acknowledge the SALEIE project as follows:

"This project idea was developed as one of the project proposals provided under the EU Lifelong Learning Programme "SALEIE" (Strategic **AL**ignment of **E**lectrical and **I**nformation **E**ngineering in European Higher Education Institutions). Project Reference No. 527877-LLP-1-2012-1-UK-ERASMUS-ENW Project funded by the EU Lifelong Learning Programme"

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