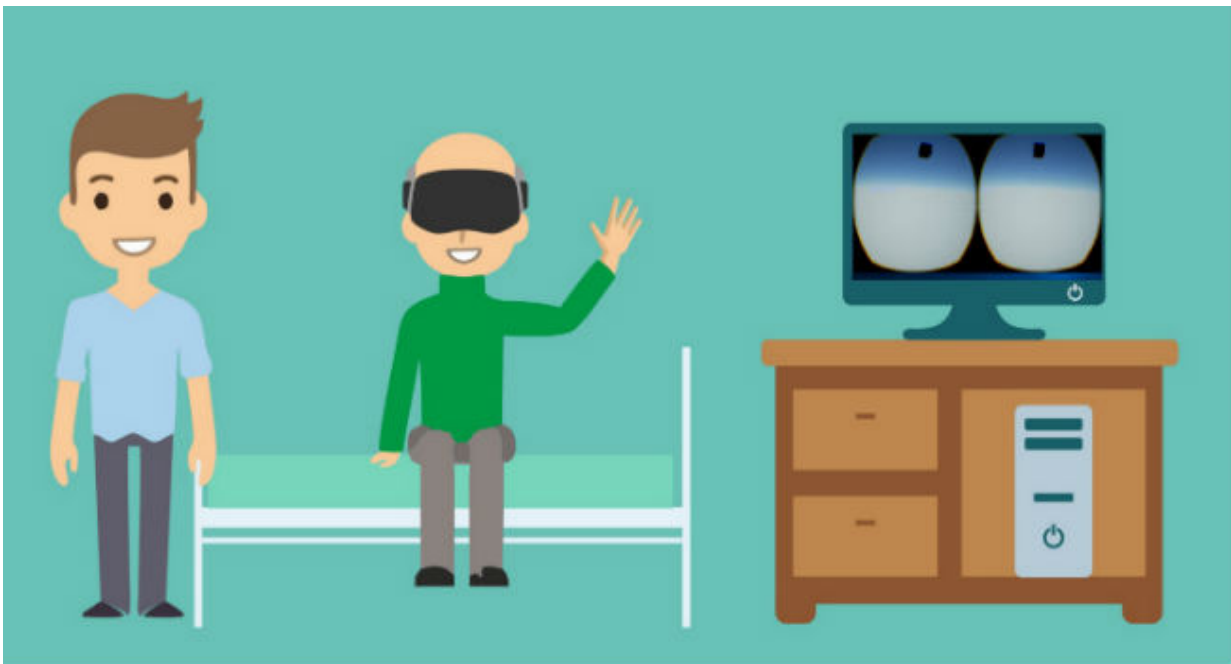


# Virtual rehabilitation to help the brain injured

February 20 2017

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Training situation . Credit: Aalborg University

A group of students at Aalborg University has developed a virtual reality rehabilitation system. Now they receive a grant from the Siemens Foundation to get their system to market

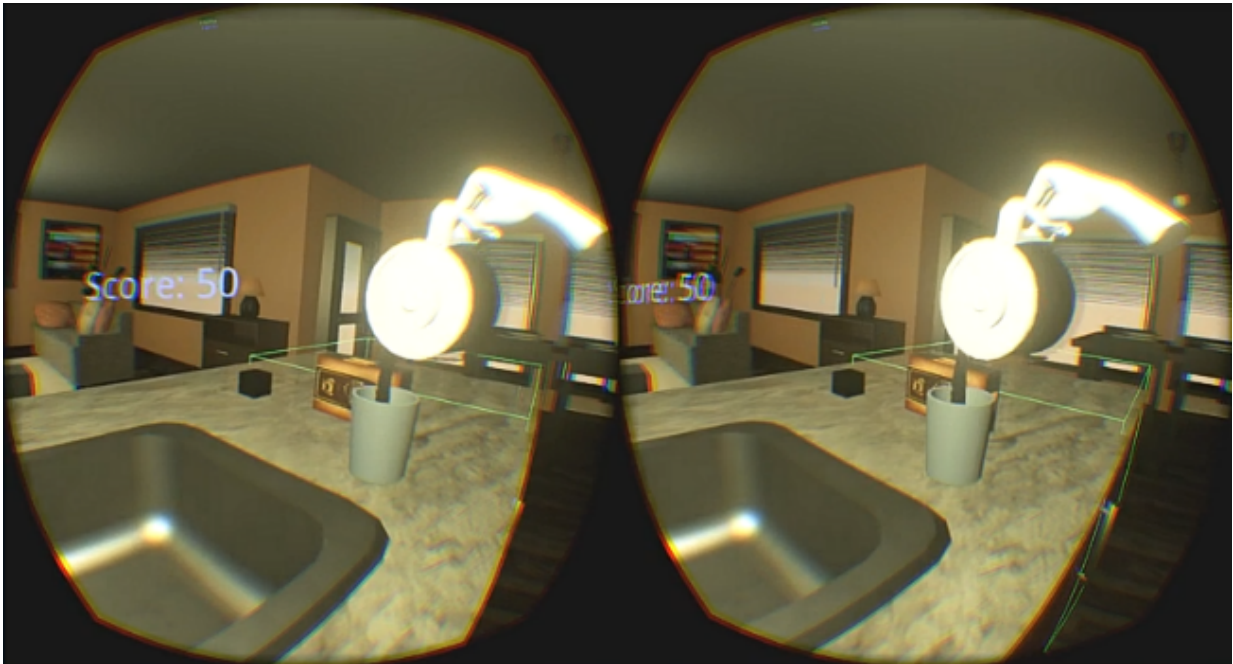
For over three years, Paula Epure, Daniel Christensen and Cristina Gheorghe have worked on a rehabilitation system for brain injured

people as part of their studies in Medialogy at Aalborg University Esbjerg. In conjunction with therapists in neurological rehabilitation at Southwest Jutland Hospital, Grindsted, they developed a system of [virtual reality](#) glasses and sensors that teaches patients skills that can give them back the basic joy of life.

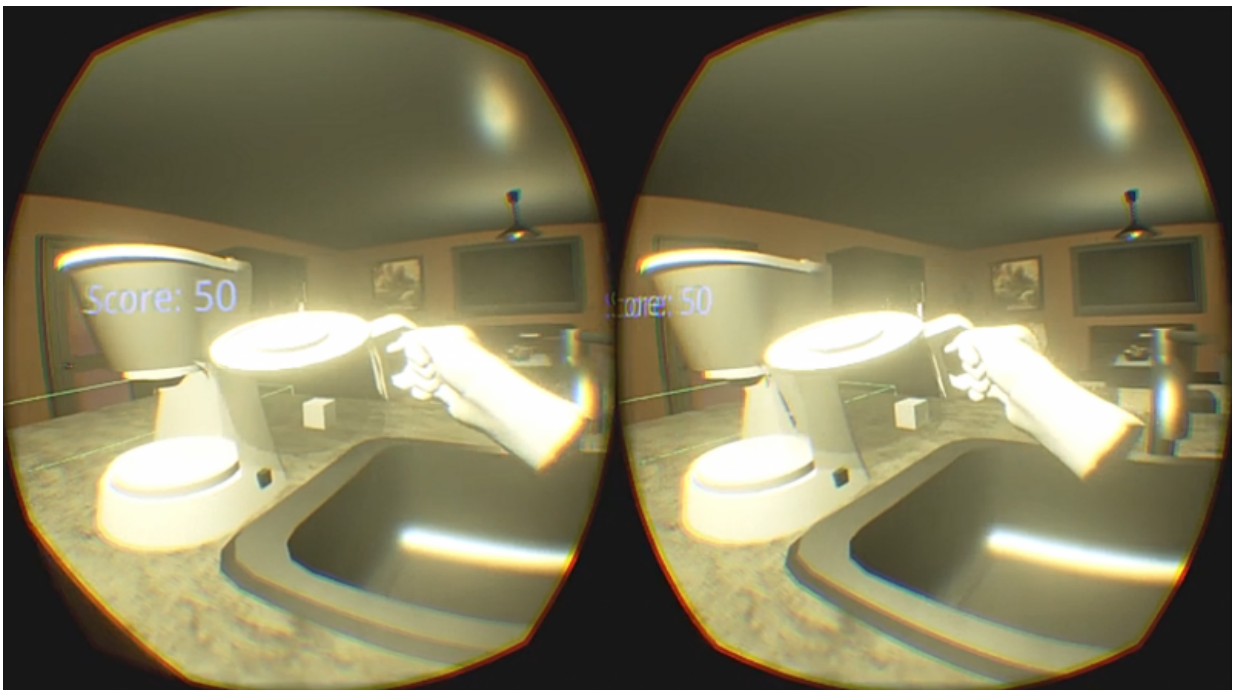
"Take for instance, a person who has to learn how to slice bread again. You have to select the right knife, learn how to hold the knife and move it correctly through the bread, etc. It is much safer to start in our simulator than with the real thing," says Daniel Christensen.

The students are now getting DKK 32,000 from the Siemens Foundation for their final project where they take the final step toward putting the system into use. The money will be used for things like an eye-tracking sensor that detects exactly where the patient is looking inside the VR glasses. It also reads the patient's feelings by measuring pupil size and movement.

The new sensors make it possible to optimize the training system already being tested in patients in Southwest Jutland Hospital. Paula Epure and Daniel Christensen have founded a company, VR Rehab, to continue development after the final project and towards a clinical test in December. The [system](#) is expected to come on the market in 2018.



Screenshot, patient's point of view 1. Credit: Aalborg University



Screenshot, patient's point of view 2. Credit: Aalborg University

Provided by Aalborg University

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