Facial Expression and Head Movement based Communication Device

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• Utilizes blinks (EMG signals) and head movements
• Allows user to operate a computer and engage in electronic communications such as email, text, etc
• Design utilizes off-the-shelf components to reduce cost and development time

Cost per device: less than $150
Project funded by Disability Communication Fund and NSF
As part of the project activity, 25 PALS (persons with ALS) were provided with the device at no cost
Facial Expression and Head Movement based Electronic Communication Device

“I have a hard time typing and this is going to help me”

“This is amazing”

“I can see this being useful for so many people”

“This gives me something to do”

“I can’t wait to use this at home”
CSUF students work on a low-cost device to help people with ALS communicate online.