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Chrono Strai Nu* (csn1009@westminstercollege.edu) and **Richard Wellman**. *An exploratory investigation using electroencephalography and machine learning techniques for fine motor classification in the EggLink brain-computer interface*. Preliminary report.

The EggLink is an electroencephalography-based brain-computer interface that will operate common household computers based on numerous data transformation techniques and machine learning classifications of fine motor signals generated in the brain. At this stage, the project involves exploring how subtle differences in measurable neurological signals can be revealed mathematically for the prototype system that classifies fine motor activity (the flicking of each of 10 fingers) to a high degree of accuracy. The performance of the system will be discussed in terms of overall accuracy of true positive predictions made by machine learning ensembles. (Received September 15, 2014)