

# ReFlexeNN – the wearable EMG interface with neural network based gesture classification

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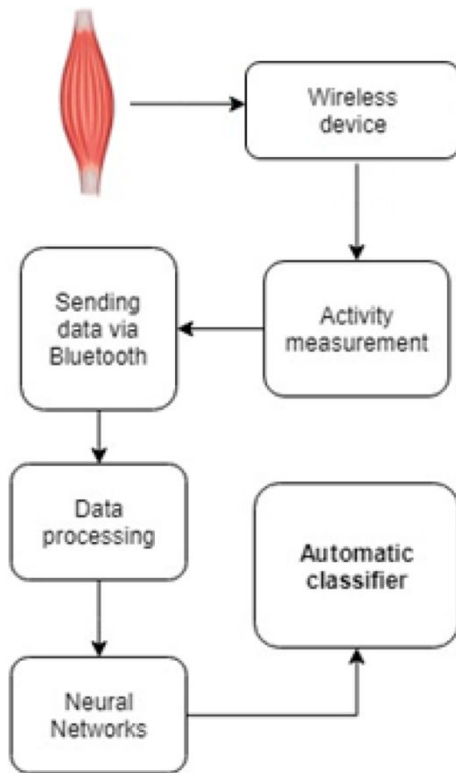


Fig. 2. Block diagram of the data flow

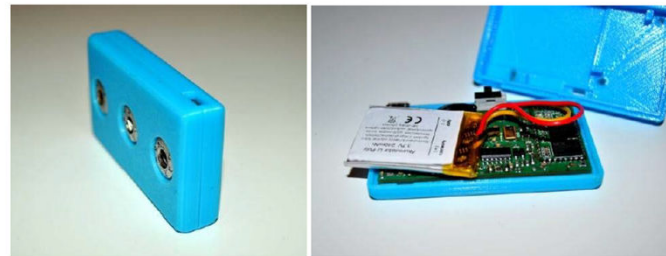


Fig. 3. Wireless device designed to measure EMG signals

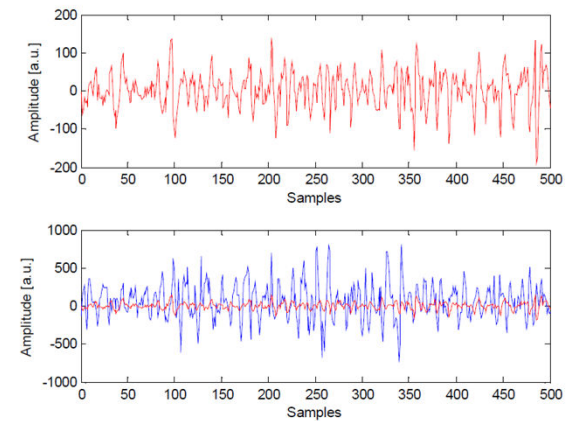
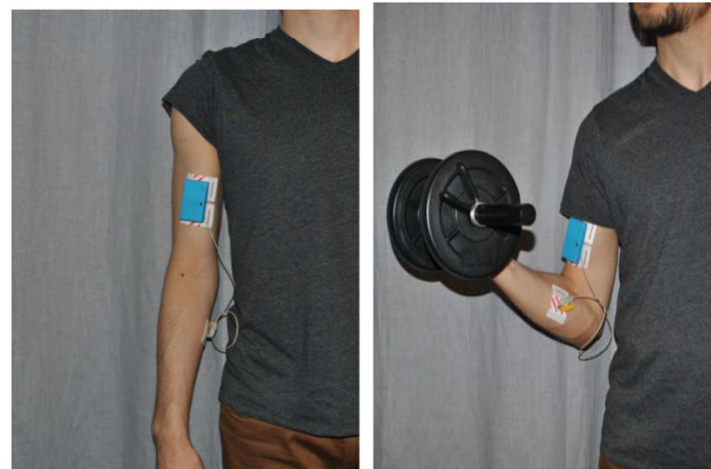


Fig. 10. The measured signal from exercise 3 (colour red) and compared with it signal from exercise 6 (colour blue)

TABLE II. The confusion matrix shows, how many exercises (Ex.1-Ex.6) was properly identified in artificial neural network (NN1-NN6 – neural network responses)

	NN1	NN2	NN3	NN4	NN5	NN6	%
Ex.1	18	2	0	0	0	0	90%
Ex.2	1	19	0	0	0	0	95%
Ex.3	0	0	13	6	0	1	65%
Ex.4	0	0	2	17	1	0	85%
Ex.5	0	0	0	0	19	1	95%
Ex.6	0	0	0	0	12	8	40%