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Title: Izhikevich Neural Networking Model; Master Neurons & Slave Neurons and Applications in modeling Alzheimer's Disease; delay in the signal and eventually periodic solutions.

Abstract: The Alzheimer's Disease main impact on the brain is the memory loss effect. Therefore, in the "neuron world" this implied disorder of signal impulses between the neurons and loss of connections between the neurons; in other words the neurons die. The goal of our research is to determine the average loss of signal and develop memory loss prediction models using an artificial neuron network. The Izhikevich neural networking model is often used while conducting research in neural electrical signal modeling.

The several layer neuron network is used for developing the simplest model. The distance between the signal spikes is used as characteristics for understanding if the system is stable. In addition, the electrical signal parameters are the same as for the human brain. The initial conditions used for the calculations are chosen random between the working neuron average sigma Iparameters.

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