Professor Byron Yu works in the field of computational neuroscience. His research is at the intersection of signal processing, machine learning, biomedical engineering, and basic neuroscience. His group develops statistical / machine learning methods for studying the activity of large groups of neurons recorded in the brain. There are two broad research aims. First, they ask basic scientific questions about how the brain carries out computations. Current projects include studies in the motor and visual cortices. Second, they apply this knowledge to develop biomedical devices that interface with the brain, in particular brain-computer interfaces to assist paralyzed patients and amputees. Professor Yu’s research is supported by an NIH R01 grant and a grant from the Neilson Foundation.

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