The MARtLET is a new digital sound controller and performance interface. The MARtLET is also a very large piece of tree bark (probably oak, but not sure yet) culled from a downed tree on Prospect Avenue in Princeton, NJ. I have fitted the MARtLET with a number of tiny light sensors. Each sensor communicates with my sound processing software by way of a program called the Wekinator, developed by Rebecca Feibrink at Princeton University. Tracing inflections of light and shadow as I move my hands and arms across the surface of the MARtLET, the Wekinator invokes machine learning models to make sense of my improvised gestural control, injecting unpredictable variations and digressions into the composed sounds that underlie each performance. The sounds themselves are synthesized in a variety of ways, mostly with Max/MSP and ChucK.

Many, many thanks to Laetitia Sonami, Rebecca Feibrink and M.R. Daniel for supporting the instrument design process through all it's "treeness" and laughing with me, not at me. Big thanks also to Jascha Narveson for helping to name the MARtLET.

All photos by Kenta Nagai.

Listen to "The Gentle Senses" (excerpt, 4:10)