





Figure 2. Mona Lisa

In this case all three mouse parameters are modulated as a function of the underlying image pixel value to exaggerate the response to brighter pixels typical of those in a region containing a lesion. Specifically, the vibration intensity is restricted an interval between 200 and 255 (as opposed to 0- 255) as a linear function of pixel intensity under the mouse pointer. This produces a vigorous baseline response. The delay between repeat cycles is also modulated, with brighter pixels generating shorter delays and more repeat cycles.

#### V. CONCLUSION

The exhibit proposed here demonstrates the use of an inexpensive, touch-enabled, mouse to render image data haptically. This infrastructure provides a cost-effective first introduction to students while providing an application platform for further studies.

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Figure 3. Mammograms

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