DESIGN 01

Watch Me – Served Two Ways

I don't have the patience to be a non-creator

— Virgil Abloh

due 18 sep 2019

This is an individual design assignment to materialize perception. Building on DET Class 05, you know how to interface with the Pi Camera and Google Cloud Vision to detect faces, recognize handwriting, label objects, and web-detect associations in images. Your homework is to respond to two different visual inputs: one which must be handwritten text, the other which should be a visual detection of your choosing. Google Cloud Vision has an enormous range of capabilities beyond the four mentioned in class, and we invite you to explore them (links to more resources in the walkthrough). Similarly, you must generate two different outputs, one of which must be kinetic. For example, you might orchestrate your first interaction as having your Raspberry Pi play an audio file saying 'Go Bears!' once the camera captures the handwritten text "Berkeley," and play ... a different audio file when it captures the word "Stanford." Your second interaction, for example, could include your Pi raising a flag that says "Hello!" using a servo motor whenever your camera detects a face. When there is no face, the flag lowers back down. Use these simple examples as a starting point for your design: that is, get the two input modes (Handwriting + X) and the two output modes (Sound + Y) first, then iterate by adding more creative elements. The focus here is on helping you gain fluency using the Google Cloud Vision and the Raspberry Pi. Document your work by uploading a PDF containing images of your final design and/or a video illustrating its function, along with some text describing the interaction. Upload to bCourses by the deadline.