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I came up with an algorithm[1] that captures live video feed, processes pixel data from each frame, and records it only when there is a significant change in the average RGB and HSL values compared to the previous frame. By filtering out frames with minor changes, the algorithm focuses on capturing moments of noticeable variation, such as sudden light shifts, movements, or colour changes in the scene. We, as humans, when sitting in front of a still landscape, are always drawn to movement and change in the scene. The dynamic aspect of detecting and quantifying shifts in colour makes the algorithm practical for experiments, surveillance, or environmental monitoring, where users seek to capture only significant visual events. The focus on significant changes connects to the concept of randomness because the captured frames depend entirely on unpredictable changes in the environment. This idea of randomness—driven by real-world events and filtered through a measurable threshold—makes the algorithm a tool for both storytelling and technical exploration.

(1) This algorithm can be found at: https://editor.p5js.org/tranvinh/sketches/9wk_hljgG