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2 About Me

I'm a 21 year old Computer Science student at CETYS Universidad in Tijuana, Mexico. Currently coursing my 6th semester (out of 8) earning top marks since the start, something that has paid off in the form of having the highest scholarship granted by the school. I have around 6 years of programming experience (around 3 with Python). As far as school projects concern, I've created database applications, web-services, business applications, hardware controls (an Arduino based self-balancing robot), and many other types of programs. In my free time I practice Parkour, a discipline involving efficient movement around obstacles as well as occasionally playing video-games.

3 What, Why and How

What: The general concept is a really simplified motion detection library that makes it a one liner for end-users/programmers to keep track of changes in between frames, allowing them to keep a log, store the frames and/or do something they desire (their custom function). Additional functionality the library could be (but in no way is limited to) exposing an easy to use way to implement human-computer interaction to other applications.

Why: Motion detection is an attractive solution for many different businesses, but implementation is usually complex enough to scare most away, or make life hell for those that do. I know of two local places that could use the abstraction this library could provide to improve their workflow, one is a company that offers security cameras that stream to a certain website, and the other is an observatory compares thousands of pictures using an ancient hard to use Unix batch script.

How: Implementing different proven/effective forms of motion detection , programming "motion listeners/lookers" to keep track of regions of interest, plus other utilities, and offering everything over a clear simple to use facade with HUMAN READABLE documentation and ample examples per feature.

4 SimpleCV Demo

This demo prints the angle between the center of the image and where a movement was detected, it also showcases a small part of what my proposed idea would contain. AngleFromMotion.py short version (around 100 lines)

AngleFromMotion.py full version