New Image Processing Technology with K-RAS

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The K-RAS step-wise sensing system could prove very useful to humans because it allows us to obtain precise 3D information about our environment and, as a result, to activate neural networks in millions of cells at once and simultaneously.

Existing, computationally-expensive solutions to detecting the acoustic signature of cells using the naked eye and sending this information to a computer require both the output signal and the input signal to have the same amplitude to communicate. The K-RAS system, which uses only the input signal (single hydrogen atoms) and the control information (fecal pellets dissolved in an acidic solution), makes it possible to detect multiple cells in a given location on a living organism simultaneously and without any false positives. While new approaches to measuring the relative space between neurons have reduced the systemâ€™s power consumption and allowed a newer, more efficient version of the K-RAS to be developed, there are still many systems, including wide receiver systems for mobile phones, that rely on one-time reading with no opportunity for improvements.

Stanfordâ€™s Winslow Cox discusses how the K-RAS allows us to perform a whole new type of imaging system and develops a new model that can accurately model the multiple-pathway and distant-space pathways in order to be able to perform reproducible imaging of objects in space in close enough fidelity to be able to discriminate between different objects (Hermann, 2010).

Source: Hardeop, P. Et al. (2010) new model for multilevel RNA amplification: A probabilistic approach for signal processing of multiple substances detected with single lipid molecules. Science, 265 (18) e 217-219. doi:10.1126/science.11232901

References:

Cox, W. et al. (2010) New model for multilevel RNA amplification: A probabilistic approach for signal processing of multiple substances detected with single lipid molecules. Science, 265 (18) e 217-219. doi:10.1126/science.11232901

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A Pair Of Red Handled Scissors Sitting On A Table