Measurement of Unique Pupillary Distance using Modified Circle Algorithm

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Abstract

This research investigated several equations and calculated the pupillary distance using pupils center coordinate. The prior research has provided two conceptual frameworks which may give a unique distance to all human. As Pupillary distance provides a core and unique information as like bio-metric for every human. The researcher did not explore the equation or pattern yet. This research proposed a framework called as Pixellary Pupil Distance and analyze the result. This research use pixel to calculate the pupillary distance where subtracts left pupil pixel with the right pupil and sum up with its distance pixel. Finally, the research sum all the pixel subtraction and its distance what this research called pupillary distance. This research builds and describes a custom dataset for test purpose because the pupil is the core element of eyes and this research did not find any precise dataset of it. The result shows the unicity of pupillary distance. This research also shows the computational time, false alarming rate, noise reduction which is described the performance of the purposed framework.
References


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Index Terms

Computer Science Algorithms

Keywords

Pixellary pupil distance, Pupillary Distance, Bio-metrics, Eyes, Distance Equation, Pupil Detection, Pupil Measurement, Edge Detection