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CS 629-02 Data Visualisation

Display Efficiency: Unique Stimulated Brain Pixels/Screen Pixels

Unique Stimulated Brain Pixels : Total Brain Pixels – Redundant Brain Pixels

Visual Efficiency: Unique Stimulated Brain Pixels/Total Brain Pixels

Screen Pixels for 1920x1080 Screen = 2,073,600

Screen Width = 38.1 CM

Approximately Unique Brain Pixels = 300,000 (based on 2.23)

Approximate Total Brain Pixels = 450,000 (based on 2.23)

Redundant Brain Pixels = 150,00030

Display Efficiency = 14.47% assuming 300,000 USBP, alternatively, if we assume that Display Efficiency is around 30% as seen in 2.23 then then we have about 622,080 unique brain pixels, and about 1,244,160 total brain pixels in this display

Visual Efficiency = 66.67% based on the approximations. This is closer to 50% if we work backwards from a 30% display efficiency for the unique and total brain pixel measurements.