Table: Summary of statistical features computed from an image.

1 - minimum $x_{max} = min\{x[n,m]\}$	2 - maximum $x_{min} = max\{x[n,m]\}$	3 -median $x_m = median\{x[n,m]\}$
4 - mean $\mu_x = \frac{1}{NM}\sum_{n=0}^{N-1}\sum_{m=0}^{N-1} x[n,m]$	5 - variance $\sigma_x^2 = \frac{1}{NM}\sum_{n=0}^{N-1}\sum_{m=0}^{N-1} (x[n,m]-\mu_x)^2$	6 - standard deviation $\sigma_x = \sqrt{\sigma_x^2}$
S7 - skewness $S_x^3 = E\left[\left(\frac{\boldsymbol{X}-\mu_x}{\sigma_x}\right)^3\right] = \frac{E[(\boldsymbol{X}-\mu_x)^3]}{(\sigma_x)^3}$	8 -kurtosis $k_x^4 = E\left[\left(\frac{\boldsymbol{X}-\mu_x}{\sigma_x}\right)^4\right] = \frac{E[(\boldsymbol{X}-\mu_x)^4]}{(\sigma_x^2)^2}$	9 - squared range: $S_r = \left(\frac{x_{max}}{x_{min}}\right)^2$
10 - Shannon entropy: $0 \le x \le 255$ $H_x = E[-\log_2 p(x)] = -\sum_{n=0}^{N-1} p(x)\log_2 p(x)$	11 - bins entropy: $0 \le x \le number\ of\ bins$ $H_b = E[-\log_2 p_b(x)] = -\sum_{n=0}^{N-1} p_b(x)\log_2 p_b(x)$	12 - normalized energy $E_n = \frac{1}{NM}\sum_{n=0}^{N-1}\sum_{m=0}^{M-1} (x[n,m])^2$
13 - rms value $E_{rms} = \sqrt{E_n}$	14- absolute deviation $\tau_x = \frac{1}{NM}\sum_{n=0}^{N-1}\sum_{m=0}^{N-1} \lvert x[n,m]-\mu_x\rvert$	15 - image uniformity: $x_{min} \le x \le x_{max}$ $\varepsilon_x = \sum_{x=x_{min}}^{x_{max}} \{p(x)\}^2$
16 - robust mean absolute deviation $\mu_{rmad} = \frac{1}{(NM)_{10-90}}\sum_{n=0}^{N-1}\sum_{m=0}^{N-1} \lvert(x[n,m])_{10-90} - \mu_{10-90}\rvert$	μ_{10-90} is used to compute feature 16. $\mu_{10-90} = \frac{1}{(NM)_{10-90}}\sum_{n=0}^{N-1}\sum_{m=0}^{N-1} (x[n,m])_{10-90}$	17 - 7.5th percentile $x_{7.5} = percentile_{7.5}\{x[n,m]\}$
18 - 15.0th percentile $x_{15} = percentile_{15}\{x[n,m]\}$	19 - 85.0th percentile $x_{85} = percentile_{85}\{x[n,m]\}$	20 - 92.5th percentile $x_{92.5} = percentile_{92.5}\{x[n,m]\}$
21 - interquartile range $x_{ir} = percentile_{75}\{x[n,m]\} - percentile_{25}\{x[n,m]\}$	22 - number of pixels at 7.5th percentile – null values $\beta_{7.5} = pixels\_percentile_{7.5}\{x[n,m]\}$	23 - number of pixels at 15.0th percentile – null values $\beta_{15} = pixels\_percentile_{15}\{x[n,m]\}$
24 - number of pixels at 85.0th percentile – null values $\beta_{85} = pixels\_percentile_{85}\{x[n,m]\}$	25 - number of pixels 92.5th percentile – null values $\beta_{92.5} = pixels\_percentile_{92.5}\{x[n,m]\}$	26 - number of pixels in the interquartile range $\beta_{ir} = pixels\_percentile_{75}\{x[n,m]\} - pixels\_percentile_{25}\{x[n,m]\}$
27 - probability of range 1: given x_1 and x_2 compute $\rho_1 = p(X \ge x_{min}, X \le x_1) = F(x=x_1) - F(x=x_{min})$	28 - probability of range 2: given x_1 and x_2 compute $\rho_2 = p(X \ge x_1, X \le x_2) = F(x=x_2) - F(x=x_1)$	29 - probability of range 3: given x_1 and x_2 compute $\rho_3 = p(X \ge x_2, X \le x_{max}) = F(x=x_{max}) - F(x=x_2)$
30 - range of probability 1: given $p(X \le x_1)$ compute $\lambda_1 = x_1 - x_{min} = F_X^{-1}\{p(X \le x_1)\} - x_{min}$	31 - range of probability 2: given $p(X \le x_1)$ and $p(X \le x_2)$ compute $\lambda_2 = x_2 - x_1 = F_X^{-1}\{p(X \le x_2)\} - F_X^{-1}\{p(X \le x_1)\}$	32 - range of probability 3: given $p(X \le x_2)$ compute $\lambda_3 = x_{max} - x_2 = x_{max} - F_X^{-1}\{p(X \le x_2)\}$