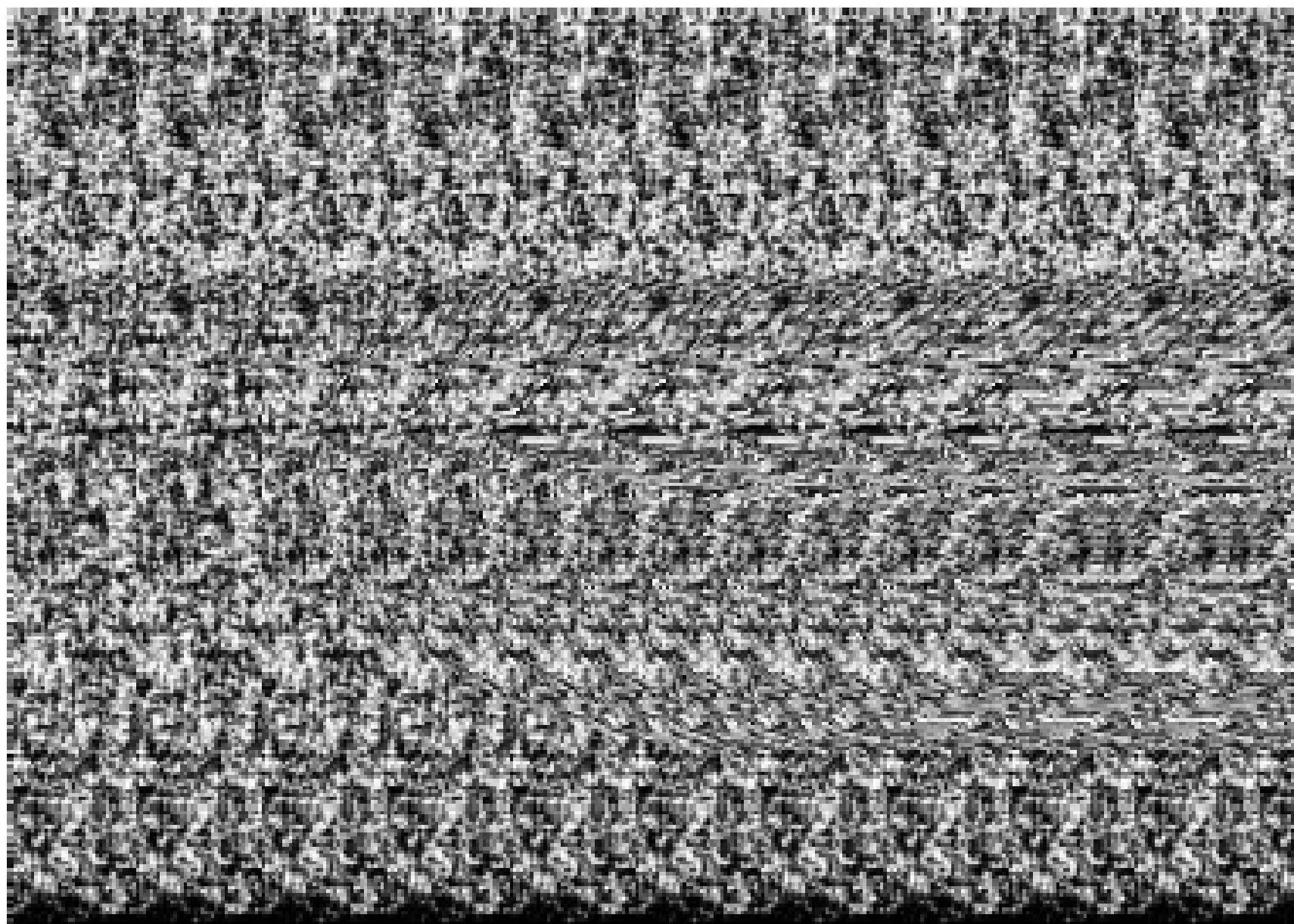
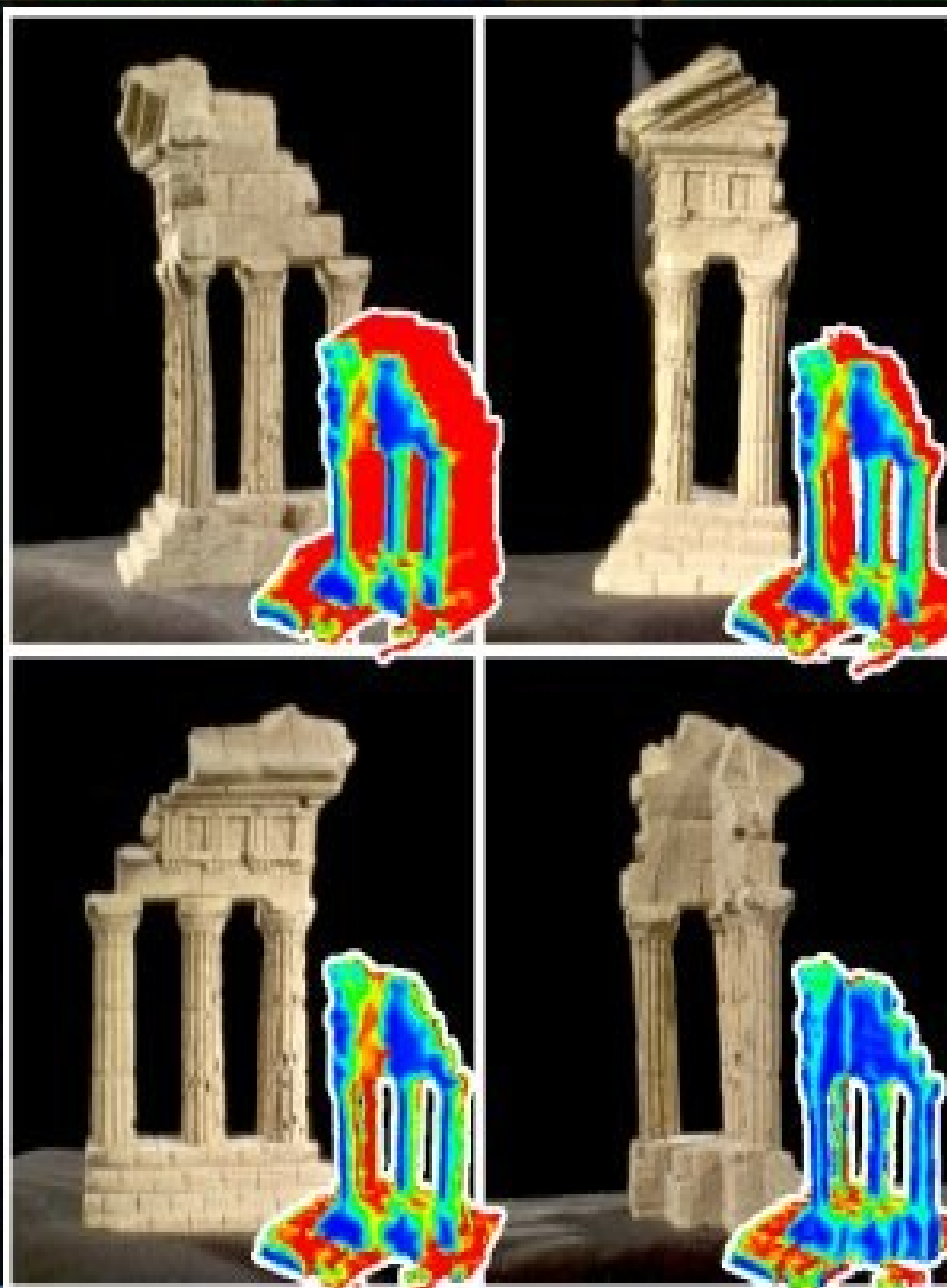
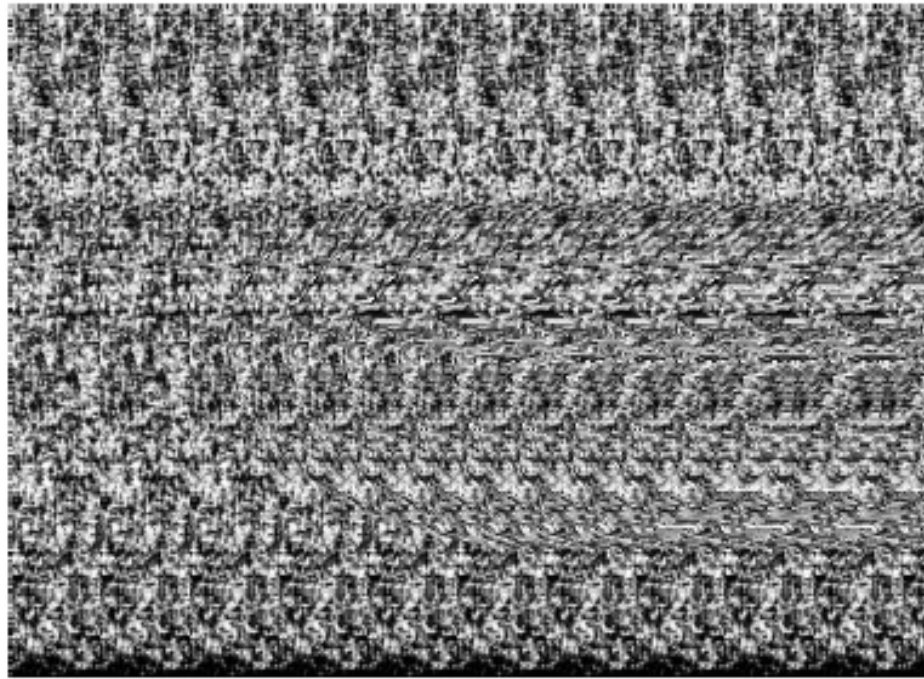


Generating and Revealing AutoStereograms

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ENGG8840
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```
for {j = 0; j < M; j ++} for {i = 0; i < M; i ++}  
    if {i < N} I(i, j) = R(i, j); else I(i, j) = I(i - N + Z(i, j), j);
```

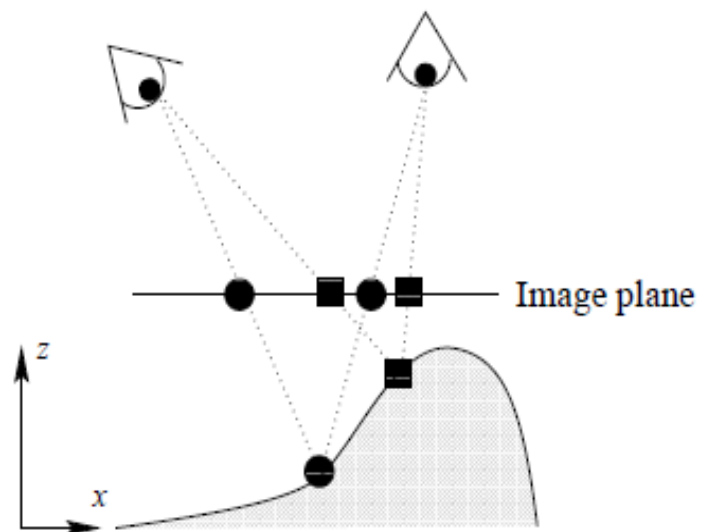



FIG. 1. The distance between repeating patterns is interpreted as depth.

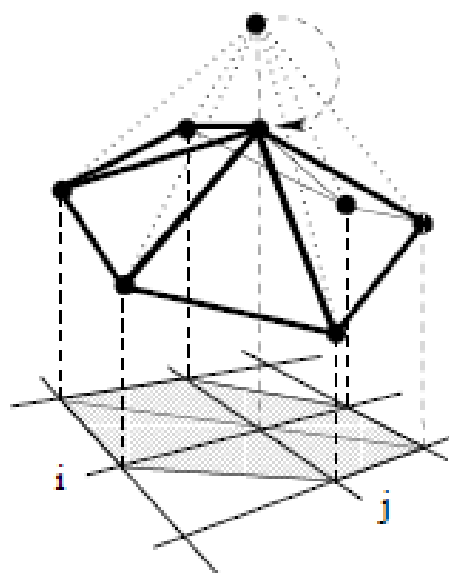
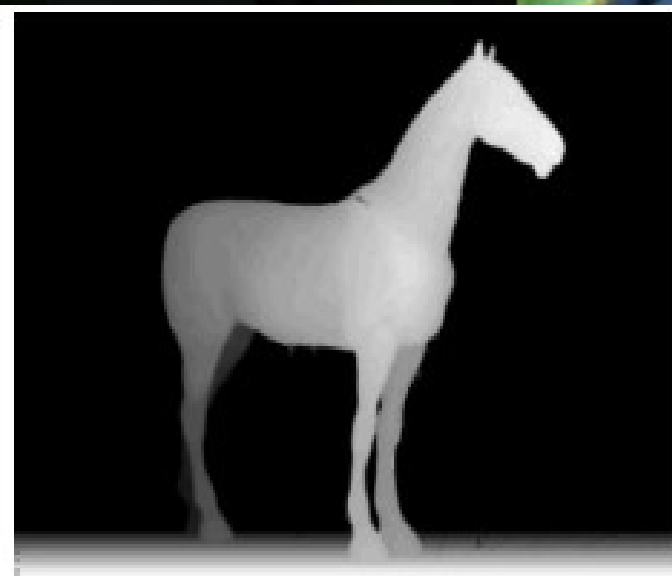
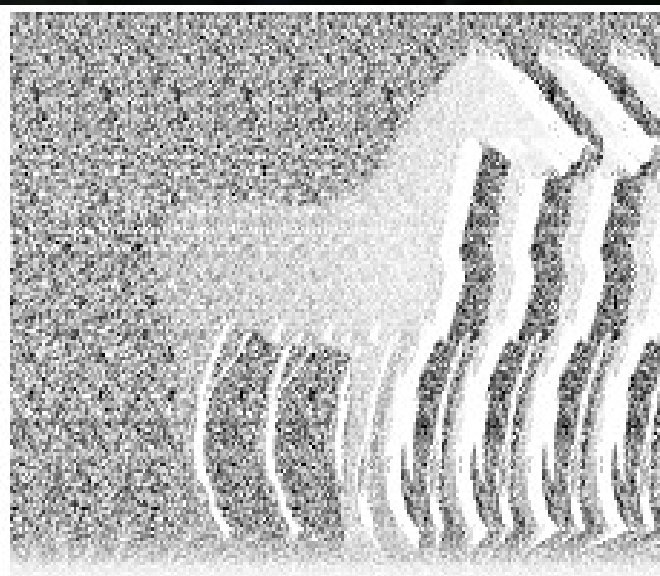
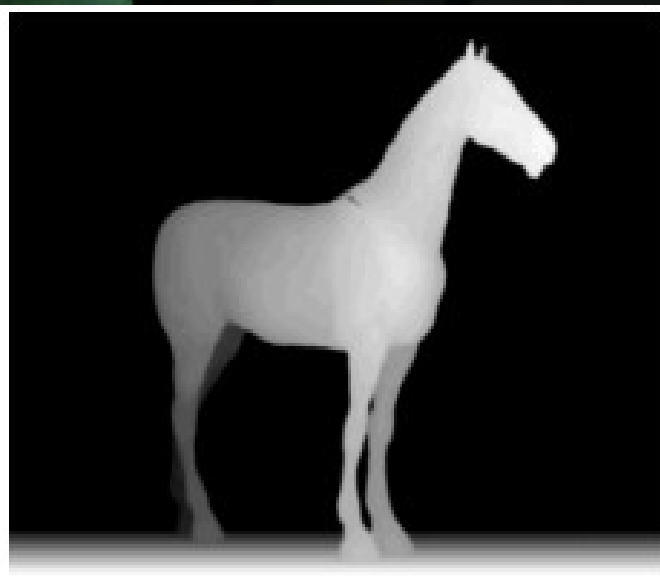


FIG. 2. The area of the six triangles is minimized by changing the $Z(i,j)$ candidate.

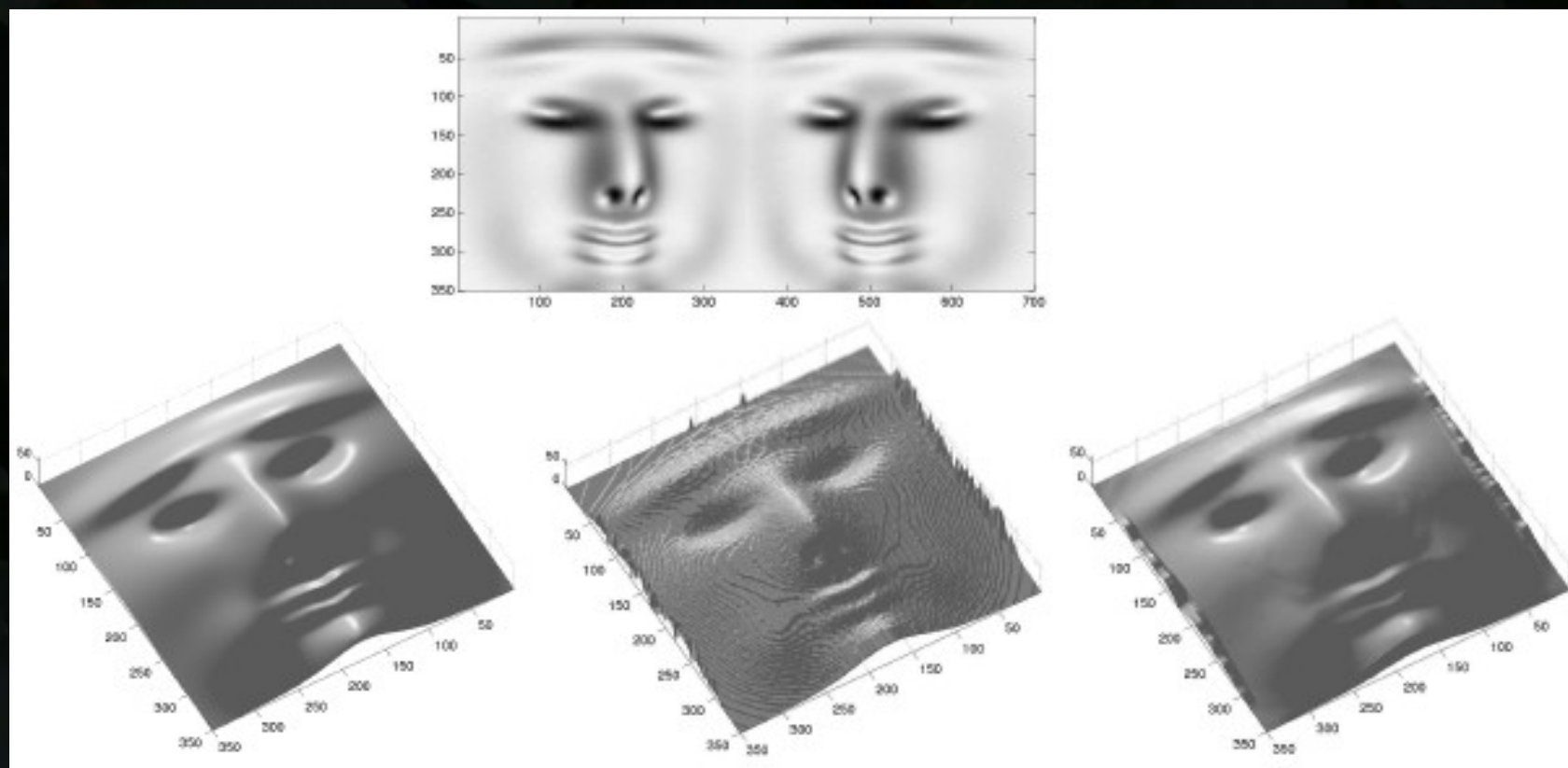


Euler-Lagrange

$$\operatorname{div} \left(g(x, y, z) \frac{\nabla \phi}{|\nabla \phi|} \right) = 0. \quad (1)$$

Steepest Descent Flow

$$z_t = g \frac{(1 + z_y^2) z_{xx} - 2 z_x z_y z_{xy} + (1 + z_x^2) z_{yy}}{1 + z_x^2 + z_y^2} + g_x z_x + g_y z_y - g_z. \quad (6)$$





Propose:

1. Create a program to Generate stereograms given a grayscale image
2. Create a program to decipher stereograms given a grayscale stereogram