Visualization of Color as Birds See It

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Summary

Our tool gives biologists a new way to quantify and analyze spatial variation in coloration of objects as seen by tetrachromats (L/M/S/U cones), especially birds. We achieve this by visualizing color using vectors. This gives rise to a novel visualization method where the origins of the color vectors are positioned on the object’s surface with some vectors pointing inside and others pointing outside. The application workflow was designed based on requirements of the involved biologists. Monochromatic output is used to prevent perceptual bias.

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References


Pipeline

Use Cases

Vectors

Chromaticity

Workflow

Results