

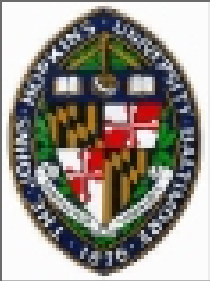


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# Image Texture Fundamentals

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Johns Hopkins Department of Computer Science  
Course 600.456: Rendering Techniques, Professor: Jonathan Cohen



# Texturing

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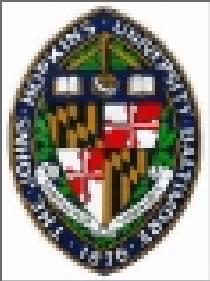
**Allows higher-frequency color variation**

- **Not just interpolated from vertex colors**

**May be 2D (surface-based) or 3D (volume-based)**

**May be strictly image-based or procedural**

- **Today we'll talk about simple image-based**



# 2D Texture Mapping

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**Requires surface parameterization**

- **Mapping from 3D surface to 2D parametric domain**

**Colors defined in 2D parameter space**

**Parameterization (texture coordinates)  
used to determine material color at point  
on surface**