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# Advanced Modern OpenGL: Rendering and Effects

Based on OpenGL 4.5, created on January 30, 2018

The logo for KDAB, featuring a stylized white lightning bolt icon to the left of the text 'KDAB' in white, all on a blue background.

KDAB

*The Qt, OpenGL and C++ Experts*

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## Advanced Modern OpenGL with Qt

- What is OpenGL?
- Terminology
- Qt helper classes

## Rendering Techniques

- Anti-aliasing
- Transparency
- Shadowing
- SSAO
- Advanced Lighting
- Physics Based Rendering
- Deferred Rendering

## Texturing

- Advanced Texturing
  - Normal Mapping
  - Parallax Mapping
  - Environment Mapping
  - Procedural Texturing
- Generating and Using Noise

## Picking

- Color Coding
- Ray Casting

## Reading List

- Recommended Books