# Rendering Photorealistic Mountain Terrain

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# Agenda

- Overview
- Background
- Height-map Generation
- Multi-texturing
- Tri-planar texture mapping
- Technology
- Challenges
- Conclusion
- Future Work
- Demo
- Questions

# Overview

# Background

# Height-map Generation

- Perlin Noise
- Diamond Square Recursive subdivision

# Multi-texturing

# Tri-planar texture mapping

# Demo

- 'w' – Move camera forward
- 's' – Move camera back
- 'a' – Yaw camera left
- 'd' – Yaw camera right
- 'e' – Pitch camera up
- 'c' – Pitch camera down
- 'k' –Screen shot
- 'l' – Toggle Lighting
- 'm' – Toggle wire-mesh
- 't' – Toggle texturing
- '1' – Toggle terrain
- '2' – Toggle skybox