## Study of the Implementation of Basic Snow Print Depression in OpenGL

Elijah Mt. Castle

Department of Computer Science Colorado School of Mines Golden, Colorado, United States mtcastle@mines.edu Colter Snyder

Department of Computer Science

Colorado School of Mines

Golden, Colorado, United States

csnyder1@mines.edu

Abstract—Realistic snow physics has been a dream in computer graphics since we first could make 3D graphics. This is now possible to a large degree all thanks to tessellation shaders. It was not long after tessellation shaders were introduced that accurate snow physics were being created. This paper seeks to explore the most basic type of snow simulation through the study of snow print depression.

Index Terms—graphics, OpenGL, snow, simulation, tessellation

## I. INTRODUCTION

Since the early days of computer graphics, snow physics took shape in the form of footprint textures that would show when the character would walk but beyond that no

II. DEFINITION OF TERMS

III. BACKGROUND

IV. IMPLEMENTATION

V. LIMITATIONS

VI. FUTURE WORK

VII. CONCLUSION