Physically Based Rendering

The art of the science of Light

$$L_o(p, \omega_0) = L_e(p, \omega_0) + \int_{S^2} f(p, \omega_0, \omega_i) L_i(p, \omega_i) |cos\theta_i| d\omega_i$$

Sohaib Alam

A thesis presented for an Extented Project Qualification

St Bartholomew's School
United Kingdom
2024-03-10

Contents

1 Introduction

Ever since the advent of computers, there has been a concerted effort to imitate the behaviours we notice in our world by computers, creating an "uncanny" semblance, that some would call too realistic. For example,

1.1 Motivation