

# CS 488 Final Project

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## Eva

*A WebGPU Real-time Ray Tracer*

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### 1. Overview

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Eva is a real-time ray tracer built in Rust using WebGPU, with an integrated scripting API.

## 2. Features

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2.1.1. Texture Mapping

2.1.2. Skyboxes

2.1.3. Phong Shading

2.1.4. Real-time Ray Tracing

2.1.5. Python Scripting

2.1.6. Reflections

2.1.7. TODO: Photon mapping

2.1.8. TODO: PBR Materials

## 3. Technical Overview

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3.1.1. Ray Tracer

3.1.2. Scripting Bindings

3.1.3. Scripting API

## 4. Development Process

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4.1.1. Lighting

4.1.2. Web

## 5. Post Mortem

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5.1.1. Porting t

## 6. Resources

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