



# Jurassic Ducks

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# Overview

- Introduction
- Tools and Techniques
- Design
- Chasing and Evading Algorithm
- Conclusion and future work

# Introduction

- Jurassic Ducks is to build an entertaining 3D interactive system.
- It is for students who want to apply their skills in 3D, interactive design, and/or multimedia to a creative end.
- It requires 3D modeling and rendering, interaction design, programmed behavior simulation, and the usual hard work and software engineering.

# Tools and Techniques

- Rendering package: OpenGL
- Computer Language:
  - C++ with Python
  - GLSL: OpenGL shading language(if needed)
- GUI: QT4
- Project Version Control: Git

# Design

- 3D Programming in cross platform
- Photo realistic rendering
- Real-time artificial intelligence algorithms for behavior

# Chasing and Evading Algorithm

- Reference book:
  - David M. Bourg & Glenn Seemann, “AI for Game Developers”, O’Reilly Media Inc, 2004.
- Algorithms
  - Line-of-Sight Chasing
  - Interception
  - Pattern movement
  - ...

# Conclusion and future work

- 3D Rendering
- AI algorithms
- Q & A...