Designing Virtual Tours of 3D-Adaptative Greenhouses

Ibero-American Symposium on Computer Graphics (SIACG)

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1. INTRODUCTION

Greenhouses design

- Greenhouses design
  - Plane
  - Grids

- 3D Virtual visit
  - Adapted form
  - All perspectives

Image 1. Plane divided in grids
Image 2. Virtual visit example
2. REGULAR GREENHOUSES

3D Basic Modules

- Designing 3D-adaptative greenhouses
  - Basic modules
  - Measures

- Regular greenhouses
  - Detection method
  - Greenhouse creation
3. IRREGULAR GREENHOUSES

Adaptation process

- Irregular problems
  - Incomplete modules
  - Adaptation

- Adaptation example
  - Ceiling
  - Z axis modification
4. VIRTUAL VISIT

**Engine 3D**

- Our Engine 3D
  - Camera movement and rotation
  - Collision detection
  - Text console
  - OpenGL, VC++

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