Grow Your Business: Enhance Your Digital Online Customer Experience

Bruno Landry
Sr Product Owner – 3ds Max Rendering | Bruno Landry @ LinkedIn

Jose M. Elizardo
Technical Specialist – 3ds Max | Jose M. Elizardo @ Youtube
About the speaker

Bruno Landry

Bruno has been in the design visualization industry for more than 15 years, working as a 3D specialist freelancer, for creative solution firms and large manufacturing companies in Montreal. After initially studying visual arts, he then completed a bachelor’s degree in industrial design where he developed a passion for computer graphics, photorealistic 3D rendering and a sensibility for beautiful things. After years of producing and managing productions of 3D rendering and animations for architecture, consumer products and transportation design, Bruno joined Autodesk to be involved in the development of real-time technology workflows in the design space. He’s now a charismatic Product Owner in the 3ds Max team, leading a successful development team in the right path.
About the speaker

Jose M. Elizardo

3ds Max Technical Specialist for the Media and Entertainment division. With over 15 years of industry experience, Jose’s mainly focused on evangelizing and promoting 3ds Max to both the entertainment and design industries.
Enhance Your Digital Online Customer Experience with 3ds Max

- **Model Creation**
  - Start from the bottom
- **Model Validation**
  - Is it gonna fly?
- **3d Animation**
  - Make it cool make it move!
- **Asset Rendering**
  - Make it look good!
- **Asset Repurposing**
  - Time is money!
- **Beta**
  - What’s cooking?
Model Creation
Model Creation

- **Rounding corners on CAD models**
  - Chamfer Modifier
- **Creating wear & tear**
  - (PBR) Physically Based Shading
  - Curvature, Texture Baking, damaged look
- **Adding imperfection & chaos**
  - MassFX & Cloth
Model Validation
Model Validation

Accurately previewing your final output in a real time environment

• PBR Viewport Rendering
  o Fact, High Quality, Accurate before going to game engine

• GPU Based Interactive Rendering
  o GPU rendering = FAST lookdev and validation

• Arnold Render View & IPR
  (Interactive Photorealistic Rendering)
  o Using interactive rendering in ARV
  o Leveraging ARV for lookdev and diagnostic
3d Animation
3d Animation

Technical / Mechanical animations

- Rigged Asset
  - Wire parameter, parameter collector, manipulator
- Section Views
  - “See-through” using Arnold Geo-clip shader
- Assembly Guide
  - Exploded view

KitchenAid mixer 3d model by ModelplusModel @Turbosquid
Autodesk Inventor sample Jet Engine model
Assemble guide www.argon18bike.com
Autodesk Inventor sample Jet Engine model
3d Lighting & Rendering
3d Lighting & Rendering

Photo Realistic, Final Frame Rendering

• Product Over White Background Rendering
• Photo integration
  o Perspective match
  o Alpha + shadows
  o HDR IBL
• Fine Tuning & Placing Highlights
3d Lighting & Rendering

- **Image Post-processing**
  - Creating multiple variation of the same images without any additional render time

- **Create variation of the same object (colorway)**
  - OSL: Open Shading Language

3d model by Moro Studio @Turbosquid
3d Asset Repurposing
Max Strengths

AR/VR

360

PRO

SolidWorks
Levels of Detail

- Software Rendering
- Game Engines
- Mobile AR - VR

Target Platforms

264,000 faces
5,400 faces
908 faces
3d Asset Repurposing

Maximizing ROI by Targeting Multiple Platforms From Single Model

• Model Optimization
  o Quickly generate levels of detail with intuitive artist friendly modeling tools

• Complex to Simplified; Automatically
  o Capture Complex Procedural Shader Graphs Into Simplified PBR Maps
  o Leveraging the power of procedural shade graphs

• Prepping Models for Mobile Experiences
  o Baking high res details onto low res models for GLTF output
AR|VR Apps
Special thanks

Louis Marcoux
Principal User Experience Designer, 3ds Max
Carlos Carpintero
Sr QA Analyst, 3ds Max Rendering
Giuseppe Schiralli
QA Analyst, 3ds Max Rendering
Brent Scannel
Product Owner, 3ds Max
Mélina Pigeon
Design Director, Artika for Living