



# 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.



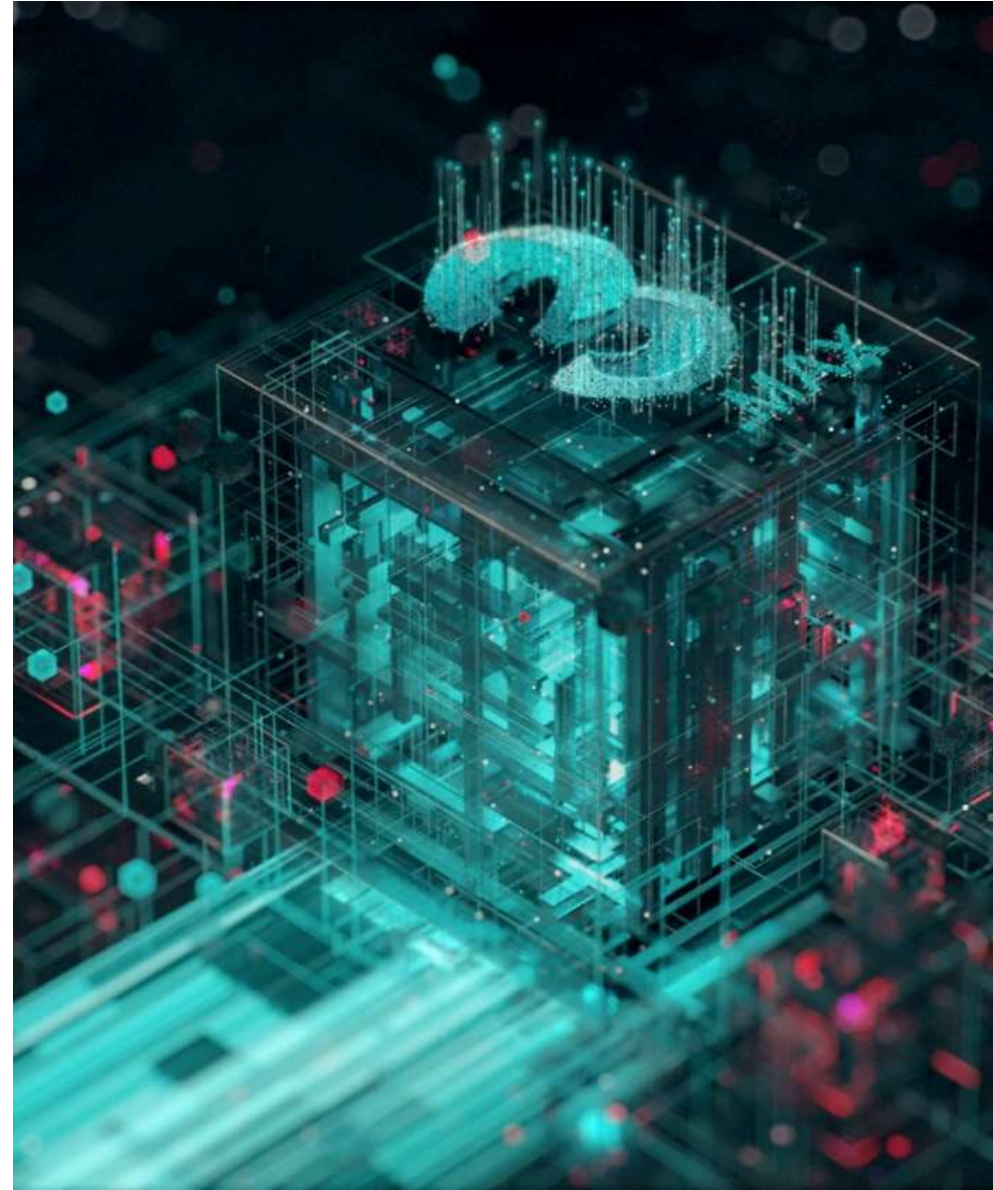
## About the speaker

### 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?

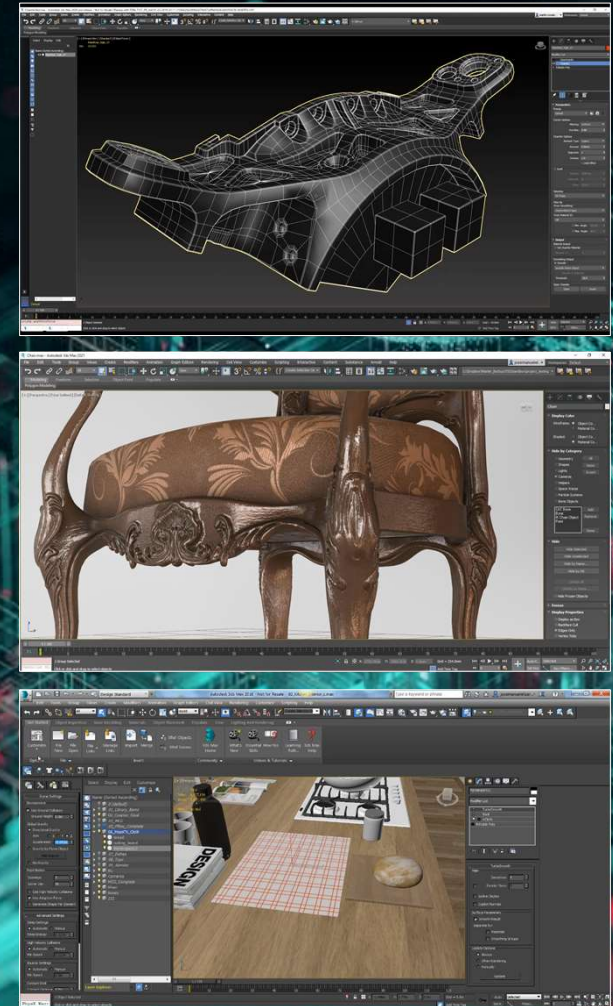


# Model Creation



# 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



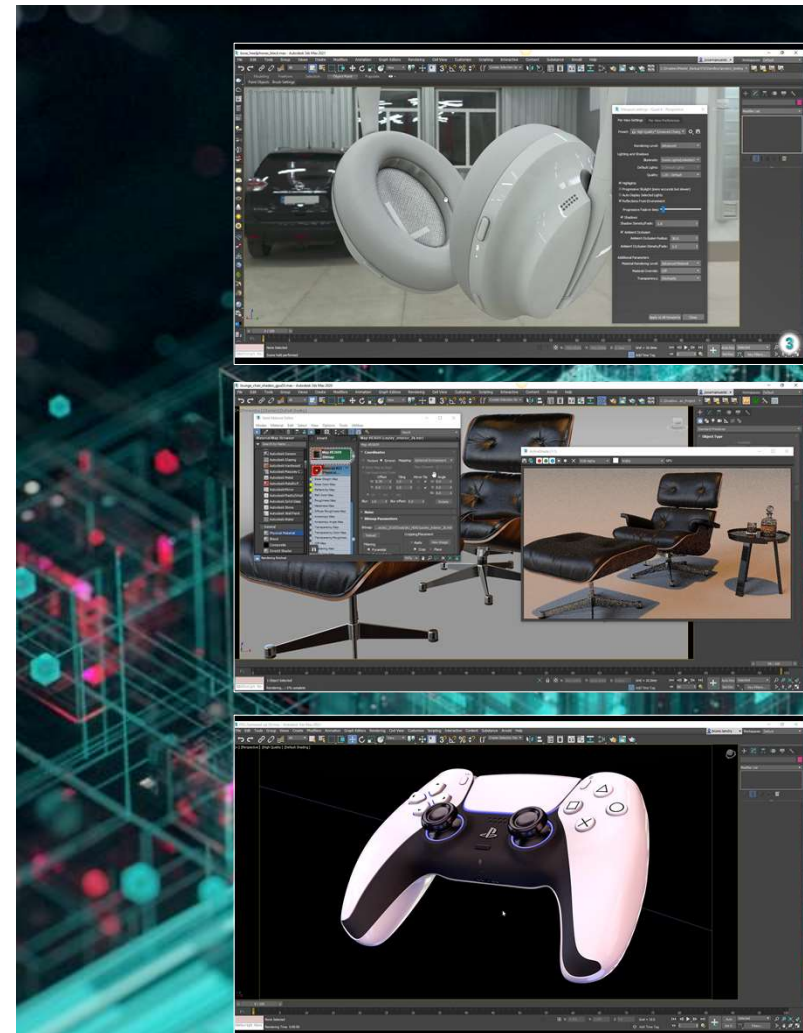
Rustic Chair 3d model by PatulianGray @Turbosquid

# Model Validation

# Model Validation

Accurately previewing your final output in a real time environment

- **PBR Viewport Rendering**
  - Fast, High Quality, Accurate before going to game engine
- **GPU Based Interactive Rendering**
  - GPU rendering = FAST lookdev and validation
- **Arnold Render View & IPR**  
(Interactive Photorealistic Rendering)
  - Using interactive rendering in ARV
  - Leveraging ARV for lookdev and diagnostic



Bose headphone 3d model by Ummani @Turbosquid

Eames Lounge Chair 3d model by Buonarrotti @Turbosquid

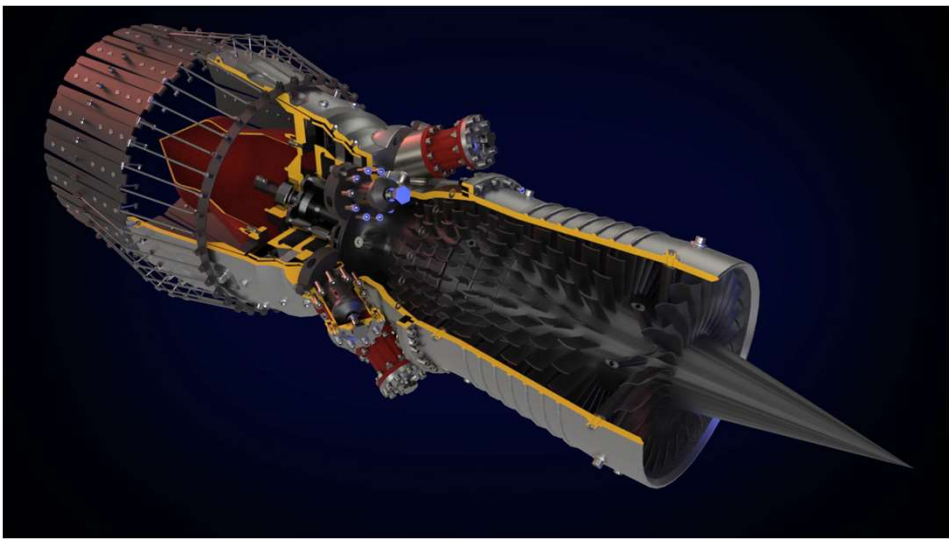
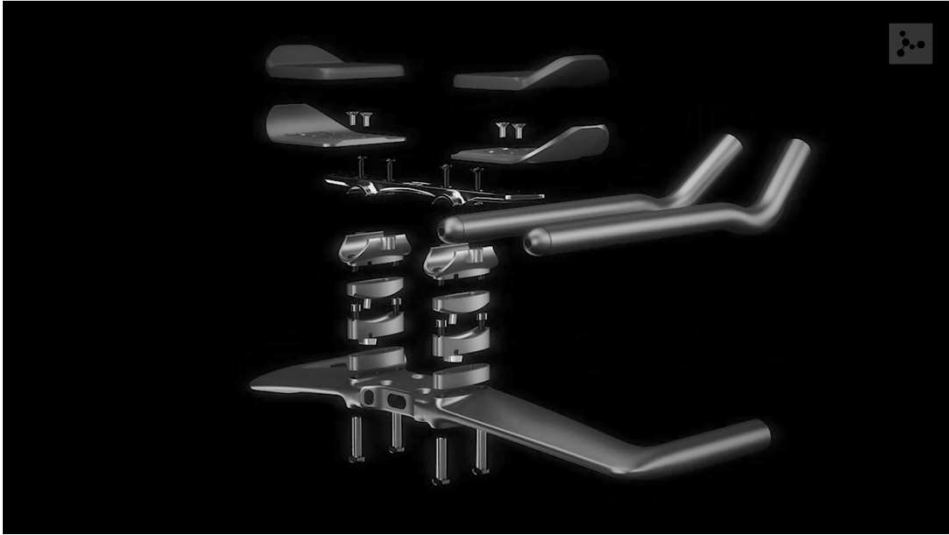
PS5 remote 3d model by ismajlkaciku @Turbosquid





3d model by ismajlkaciku @Turbosquid

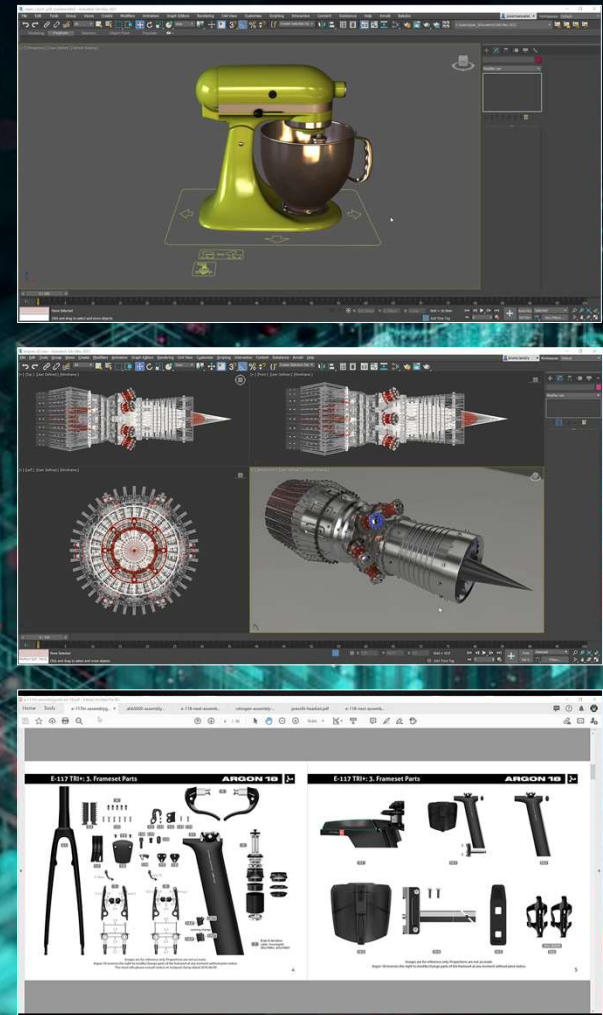
# 3d Animation



# 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

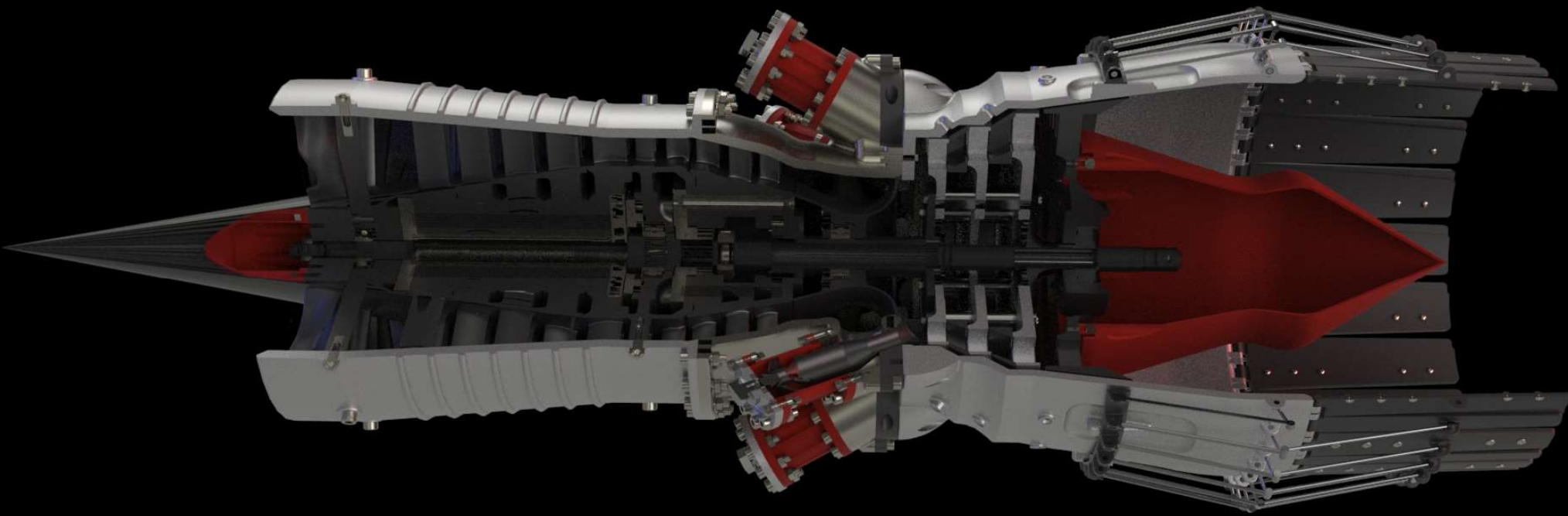


KitchenAid mixer 3d model by ModelplusModel @Turbosquid  
Autodesk Inventor sample Jet Engine model  
Assemble guide [www.argon18bike.com](http://www.argon18bike.com)



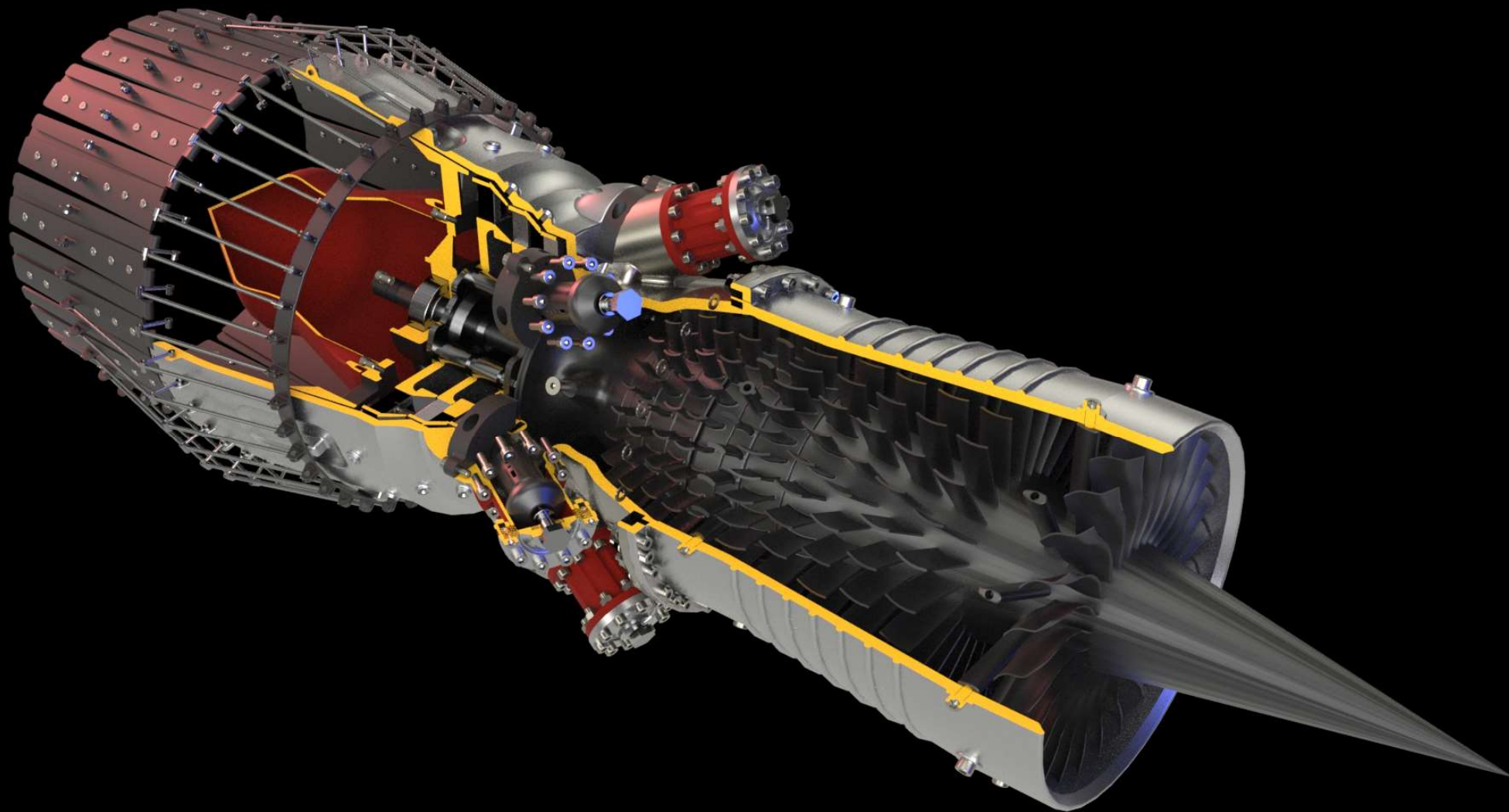
KitchenAid mixer 3d model by ModelplusModel @Turbosquid





Autodesk Inventor sample Jet Engine model





# 3d Lighting & Rendering



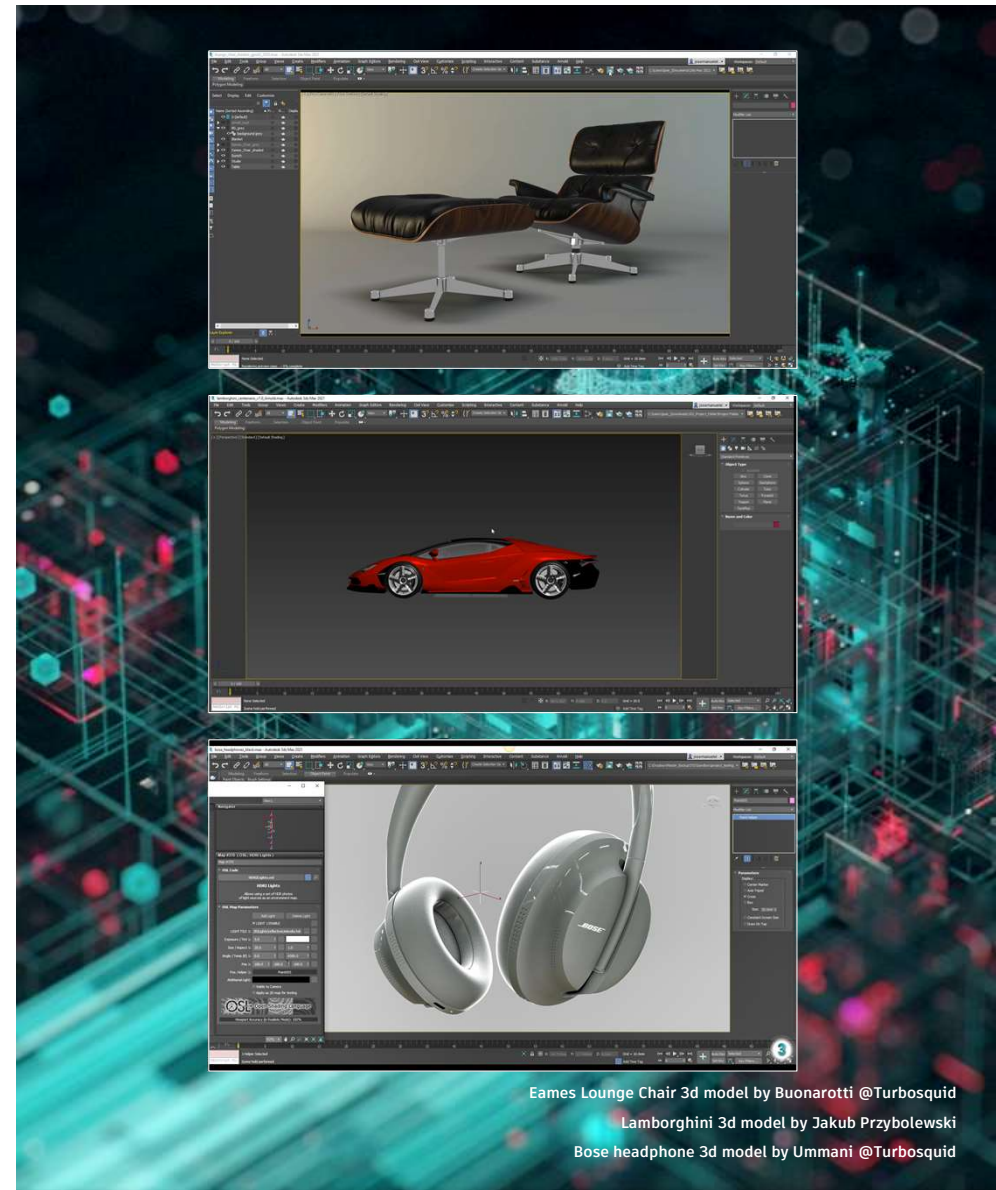
Eames Lounge Chair 3d model by Buonarotti @Turbosquid



# 3d Lighting & Rendering

## Photo Realistic, Final Frame Rendering

- Product Over White Background Rendering
- Photo integration
  - Perspective match
  - Alpha + shadows
  - HDR IBL
- Fine Tuning & Placing Highlights



Eames Lounge Chair 3d model by Buonarotti @Turbosquid

Lamborghini 3d model by Jakub Przybolewski

Bose headphone 3d model by Ummani @Turbosquid

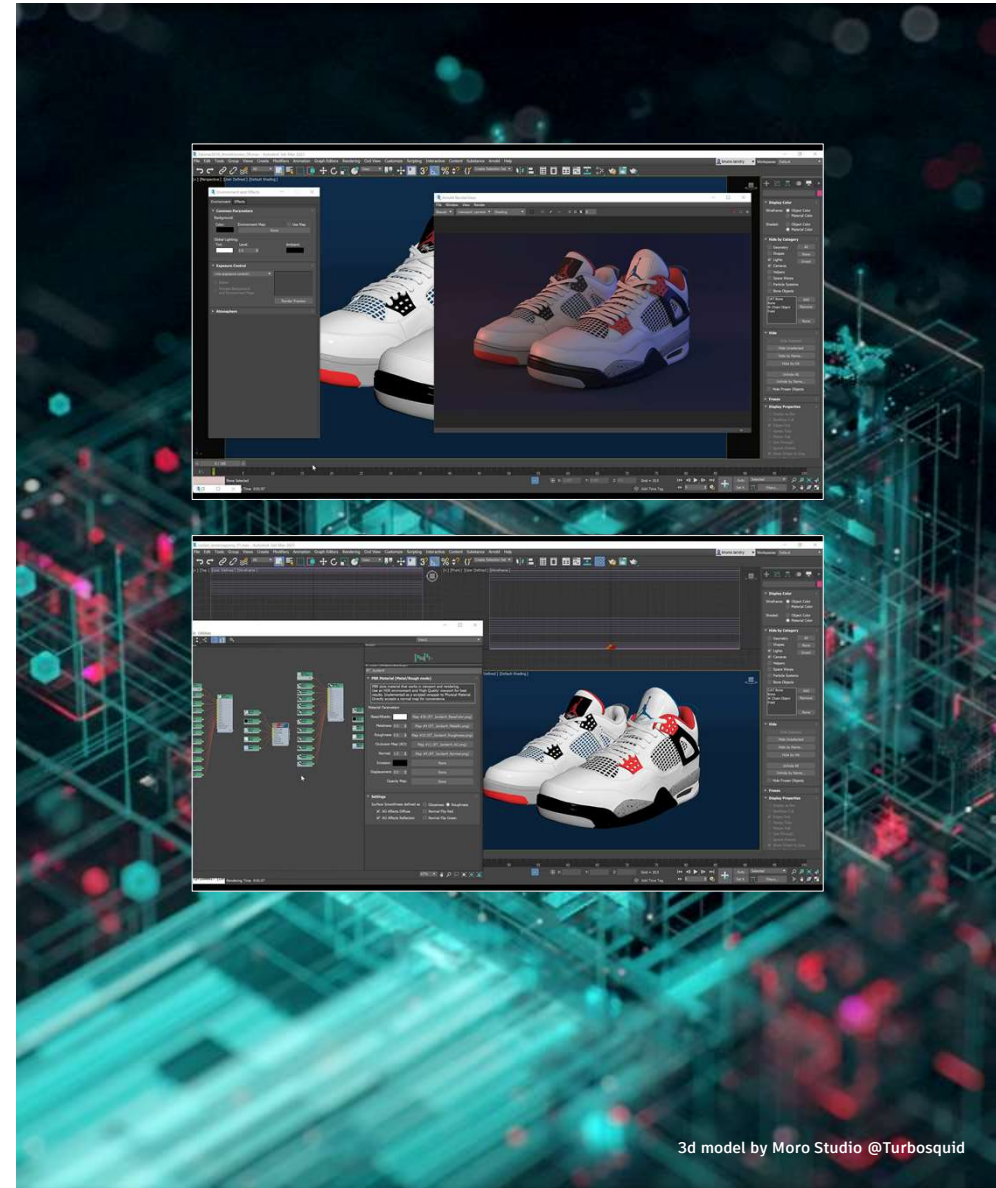






# 3d Lighting & Rendering

- **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 model by Moro Studio @Turbosquid







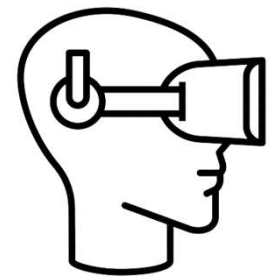
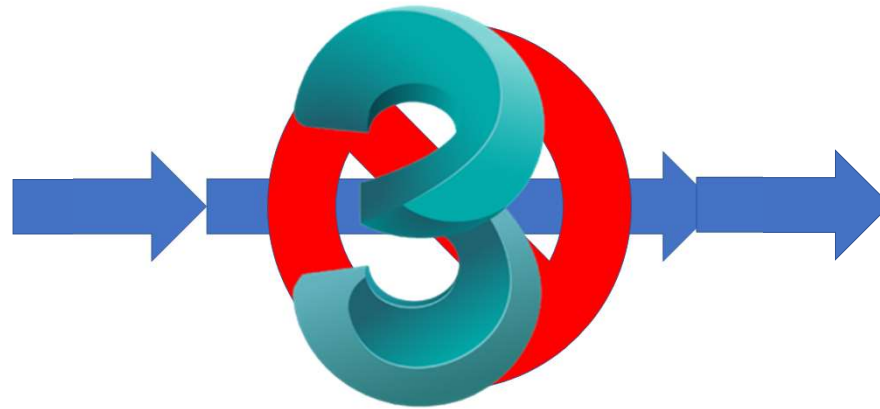




# 3d Asset Repurposing



AR\VR

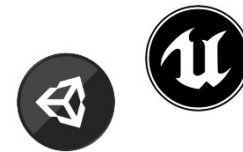




# Levels of Detail



Software Rendering



Game Engines



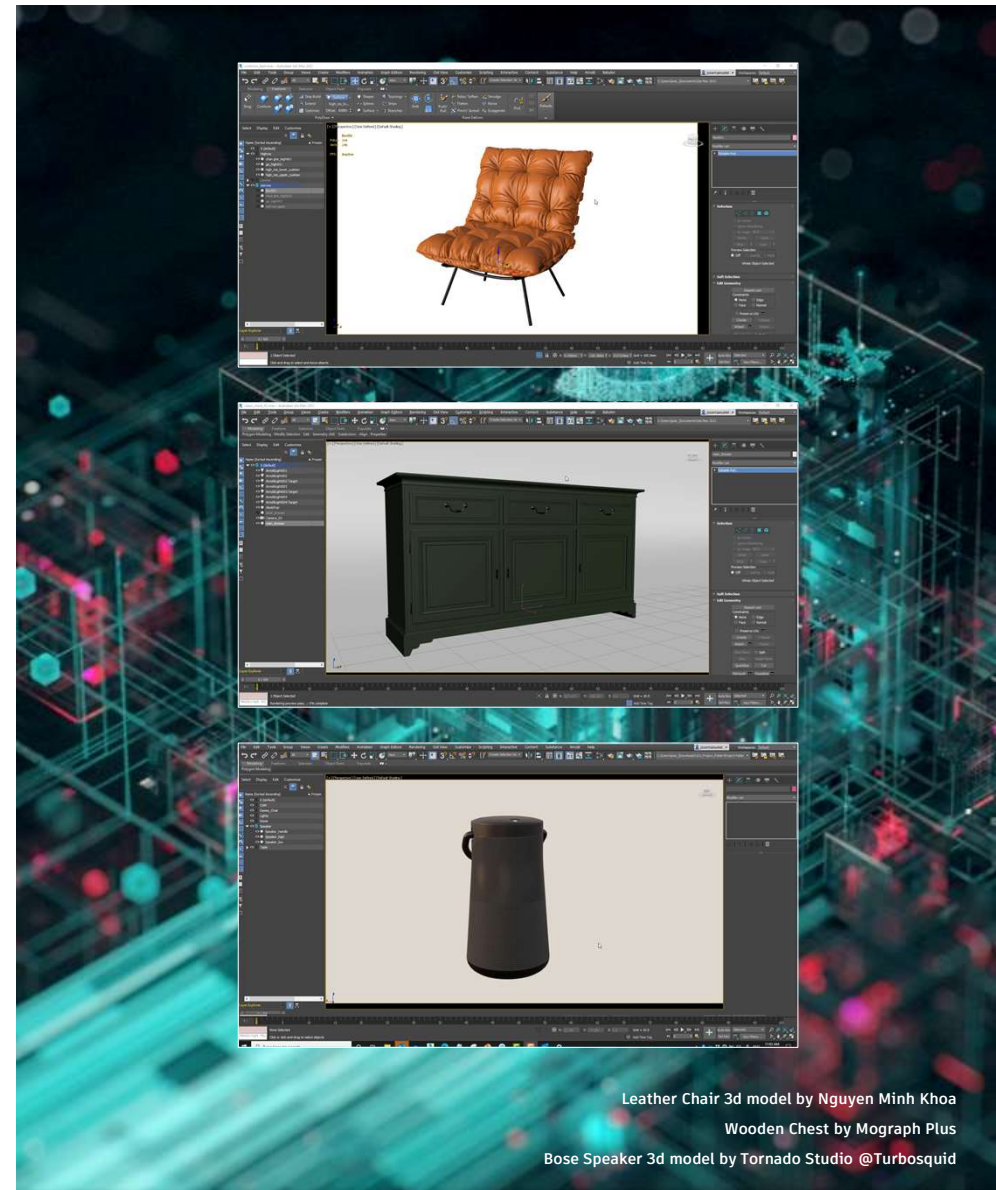
Mobile AR - VR

Target Platforms

# 3d Asset Repurposing

Maximizing ROI by Targeting Multiple Platforms From Single Model

- **Model Optimization**
  - Quickly generate levels of detail with intuitive artist friendly modeling tools
- **Complex to Simplified; Automatically**
  - Capture Complex Procedural Shader Graphs Into Simplified PBR Maps
  - Leveraging the power of procedural shade graphs
- **Prepping Models for Mobile Experiences**
  - Baking high res details onto low res models for GLTF output



Leather Chair 3d model by Nguyen Minh Khoa

Wooden Chest by Mograph Plus

Bose Speaker 3d model by Tornado Studio @Turbosquid



# 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



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