



# NEXUS

*Interactive Procedural Animation Engine*

**Nexus Engine is a powerful technology that has reimagined the art of real-time animation** by using AI-generated procedural animations and speech engines.

Watch your character come to life as our robust system produces convincing interactions and conversations formally achievable only by custom animation and live performers.

## Includes 3 Main Components



### ACTION ENGINE

Body, gesture and locomotion



### SPEECH ENGINE

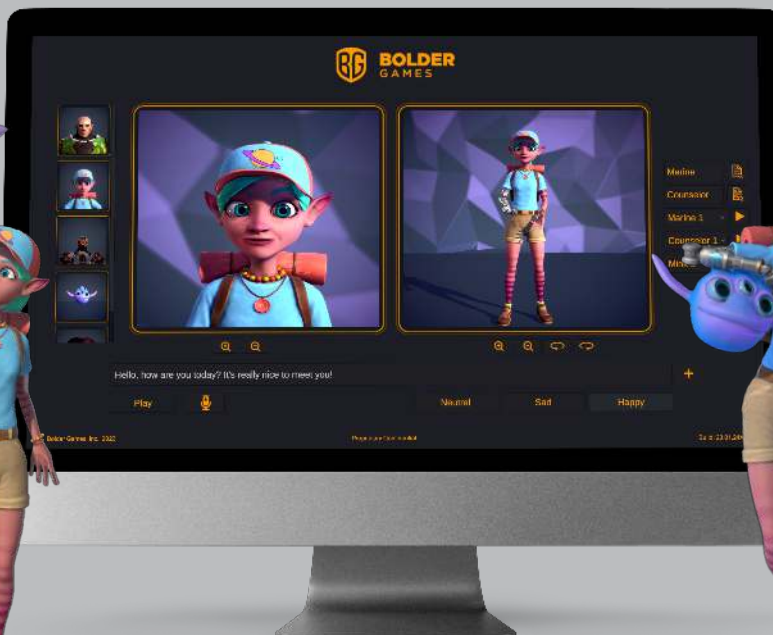
Face and lip sync



### THOUGHT ENGINE

AI Integration

*Bring your characters to life with the Nexus Engine animation system*



**Creators have as much or as little control as desired.**

Nexus Engine can fluidly blend between predetermined procedural animation solutions and custom full-body hero animations.

**Save valuable production time and resources.**

Complex modular animations can be created in real time instead of hours or days from scratch.

**Promotes collaboration across all departments.**

Directors, managers, and artists from other non-dev fields will be able to contribute significantly to animations, allowing the highest level visionaries to create exactly what they need with minimal animation experience.

**Demos available upon request**

***Integrate our groundbreaking animation system to your pipeline and save valuable production time while engaging consumers with live interactivity.***

Animation is paramount in bringing characters to life however despite advances in AI, character creation has remained a tedious and expensive process. Nexus Engine effectively uses a procedural and parametrized system that circumnavigates the need for custom build resulting in a faster than ever character set up. The result is a character interaction that is functional and solves the challenge of retaining feature film quality, IP-likeness, and high production value.

### **Real-Time Interactivity and Live Performance**

Nexus animations are generated in real time allowing for a more diverse and always unique set of movements. This means no more predictable and predefined animations.

The characters exist in a believable state of alive activity effectively handling both lively interactions and idle states.

### **Hero Animation and Seamless Motion Flow**

While procedural systems have so much potential, great storytelling is still informed by directed and specified character movements and actions.

The Nexus driven character has the ability to seamlessly flow between custom hero animation, rapid specified input, and no input at all.

### **Build a Compatible Animation Library**

Nexus animations are built to be shared across compatible skeletons resulting in a library of reusable movements for all subsequent characters.

Animations can be combined and blended on the full bodies or on skeleton parts building an infinite amount of combinatorial animations.

***Ready for Nexus Engine to inspire your next project?  
Contact us to request a demo and learn more.***

*Bolder Games // [www.NexusURLGoesHere.com](http://www.NexusURLGoesHere.com) // phone number?*

#### **Nexus Was Built For:**

##### **Themed Entertainment**

*Live character shows, immersive in-park activations, AI conversational experiences*

##### **Location Based Entertainment**

*Branded activations, retail, museum, events, expos and conventions*

##### **Game Studios**

*Batch use case, agent based modeling, live avatars, metaverse*

##### **Feature Animation**

*Film and TV integration*

#### **Current Feature Set:**

- Core animation system built in C# and C++
- Authoring Interface built in Unity and Unreal
- Unreal and Unity Engine Integration at functional and UI/UX feature parity
- Performances can be controlled via API, WebSockets, EMS or TCP interfaces
- Animation blending and IK currently via game engine
- Uniform flexible messaging pipeline
- Supports cloud-hosted character-bundles
- Nexus Runtime works on Windows, Mac, iOS, Android (Switch, Xbox coming soon)
- Custom lip-sync engine in C++ for real-time requirements in conversational animation

