

08:45 - 09:00

## Welcome

Main

### Rémi Verschelde

Presentation of the new year for Godot and Welcome to the assistants at GodotCon 2021

09:00 - 09:30

## WebXR in Godot

Tech

### David Snopek

WebXR is an open standard that allows creating VR and AR applications that run in the web browser. This can be a useful tool for getting your games or apps into "walled gardens" (like the Oculus Quest) or sharing VR and AR experiences with any device without requiring the user to download or install anything. And now you can make WebXR apps and games with Godot!

09:30 - 10:00

## (Almost) A Year of Fam Jams

Community

### Paul Gestwicki

I am a Computer Science Professor who teaches game design and development, but more importantly, I am a husband and a father of four boys aged 13, 10, 8, and 5. When the global pandemic forced the first round of lockdowns in March 2020, I tried to think of something fun and creative that my family and I could do together. We decided to do a "Fam Jam": we set aside one Saturday for a family game jam. We used Godot Engine along with other FOSS tools. This became a monthly tradition.

In this presentation, I will talk about our jam structure and what we learned along the way. There have been some tensions and disagreements, but I am proud of how we overcame them. Now, we have a much smoother process for working together.

10:00 - 10:30

## Visualizing Austria in Godot

Non-Game projects

### Karl Bittner & Mathias Baumgartinger

As there is an increasing need for realistic large-scale landscape visualisations in order to involve a broad public in social issues such as landscape and climate change or the expansion of renewable energy, we use the Godot Engine for a cross-project geospatial landscape visualization named LandscapeLab: The LandscapeLab uses different kinds of geodata (raster and vectordata) from geographical open data sources to generate real-time 3D landscape renderings for workshop environments and VR headsets using Godot. To bridge the gap between the gaming and the geodata world, we developed a GDNative addon named Geodot, for geodata loading and processing.

Geodata is an important resource not just for research, but also for games - most recently, Microsoft's Flight Simulator 2020 inspired a wide interest in the gaming sector. Our Geodot demonstration will show how geodata can be used in Godot and how the loading and processing of the data works in the background.

10:30 - 11:00

## Authoritative Multiplayer with Godot

Tech

### Stefan\_Gamedev

In this presentation, we are going to see high-level overview of authoritative multiplayer. What elements a back-end consists of, the considerations that go into the design of said back-end, and how Godot can be used for such a back-end.

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11:00 - 11:30

### Teaching Godot Engine: Learning Experience Design

Community

Teaching

#### Gastón Caminiti

During 2020, in GTC IEEE Argentina, we carried out a series of educational initiatives with Godot Engine. In this presentation, we would like to share our experience by presenting criteria on the construction of teaching proposals with the engine and the aspects of Godot that contribute to both learning and research in video games, and how can this be included in a formal curriculum.

**Presentation in Spanish with English subtitles.**

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11:30 - 12:00

### Wwise Godot Integration: integrating audio middleware into Godot

Audio

Tech

#### Alessandro Famà & Jorge Garcia

This talk presents the process of integrating a popular audio middleware (Audiokinetic's Wwise) into Godot. Wwise is widely used in the game industry for various types of game projects, from AAA to game jams. An overview of the middleware will be provided, as well as details of the GDNative plugins. The talk will include short demos to demonstrate various features of the integration. These will cover the installation process, the use of custom nodes to play sound effects, callbacks, Visual Script and the WAAPI picker.

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12:00 - 13:00

### Flash Talks

In this section, we will see some shorter talks about a variety of topics. Some games with interesting features, and some technical tools and news.

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#### The Garden Path

Community flash talk

Game

#### Louis Durrant

The Garden Path' is an upcoming sandbox game built in the Godot Engine. It's creator, Louis Durrant, will discuss working in the engine, philosophies and inspiration for the game's design, as well as present a live demo of the game with commentary.

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#### Godex: An ECS for Godot

Community flash talk

Tech

#### Andrea Catania

In this presentation, we will see a short introduction on the ECS design pattern, what it is and how it works, it's advantages and disadvantages. Then we will also see a short demo on using ECS in godot with Godex.

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#### Dialog system in visual novel Hauma

Community flash talk

Game

#### Senad Hrnjadovic

Hauma is a coming visual novel that features multiple choice dialogues, full voice acting, cut scenes... In this talk we will see how the dialog system was set up.

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#### The new rendering of Godot 4.0

Keynote

Main

#### Juan Linietsky (Reduz)

Juan is going to talk about the coming rendering features of Godot 4.0.

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13:00 - 13:30

### Godot editor on the Web. What's new, tricks, need-to-know...

Tech

**Fabio Alessandrelli**

Let's see an overview of the new in-browser version of Godot. How does it work, what are some tricks...

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13:30 - 14:00

### Interacting with the Internet of things for pleasure and profit.

Non-Game projects

**Julian Todd**

Many home automation devices like smart plugs and indoor air quality sensors work with MQTT.

This protocol is simple enough to implement in GDScript as well as very cheap ESP8266 wifi enabled microcontrollers running Micropython. This talk will give an overview of the tool-chain as well as how to apply it to games interacting with the real world and distributed robotics.

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14:00 - 14:30

### Godot for the Enterprise

Community

**Luke Dary**

Red Hat Summit often includes amazing technical demos built on open source technology. The past two years have included applications created in Godot to add dynamic and interactive visualizations.

This talk will show how Godot usage at Red Hat has grown in the last two years, our experiences with it for things other than gaming, and how to use it more in an enterprise context.

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14:30 - 15:00

### Shader shenanigans

Tech

Technical Art

**Paweł Fertyk**

Shaders are magic! In this coding session I'll show and explain some effects you can create using shaders in Godot Engine. Examples include a UV light, a 3D object outline, and a portal.

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15:00 - 15:30

### Godot Wild Jam's story

Community

**Kati Baker**

This talk will share the story of the Godot Wild Jam (GWJ), why it was created, how it has grown, and its future goals. We'll discuss how to start a community and the pillars in maintaining and moderating GWJ. We'll also be highlighting developers who have continued their own work post-GWJ after getting their start with us.

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15:30 - 16:00

### Extending the 2D Renderer: Adding 3D-Like Shadowing

Tech

**Pedro J. Estébanez**

Hellrule', despite being a 2D game, features 3D-like graphics and lighting. The current support for 2D shadows in Godot 3 was not enough for what was needed for this game. Therefore, the 2D renderer was extended to support two different kinds of shadows: one kind being similar to AO (Ambient Occlusion), applied to the background tiles, and the other one being a sort of faked shadows casted over the foreground tiles. Both react in real time, occluding the explicit light sources so only the ambient light reaches the surfaces, and both also feature soft edges.

This talk will explore how the renderer was extended to implement these features and also explain how these shadowing techniques themselves work.

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16:00 - 16:30

**Thank You!**