

# LOW POLY ROCK GENERATOR

Documentation and Setup

Don't forget to leave a  
review 😊

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## Contact

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If you're looking for support, please include your invoice in your email. I'm not able to help you otherwise.

Refunds are available. Send me an email with your invoice and reason why you're unsatisfied with the asset.

## What's Included?

- Parameter-based rock generator
- Rock sculptor
- Export to .Obj (Wavefront) (Editor only)
- Runtime Generation
- Quickstart prefabs

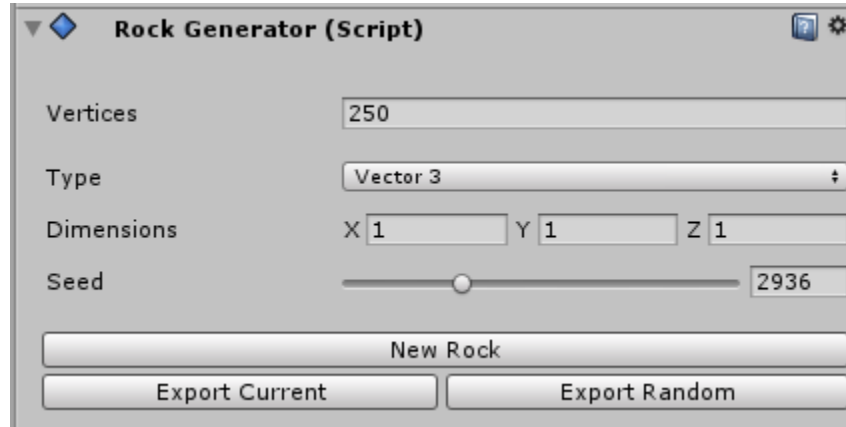
Due to the original license of the library used for mesh generation, all of the files within the **"MIConvexHull"** folder are under the **MIT License**.

# Setup & How To Use

## Rock Generator

You can find a **prefab** already setup in the “Quickstart/Examples” folder with the name “Rock Generator”. In case the prefab is corrupted because of Unity version changes, do the following:

- Create > 3D Object > Cube
- Add Component > Rock Generator



## Parameters

**Vertices** – Vertex count that is used to generate the mesh

**Type** – Vector3 or Spherical – Defines whether the rock will be generated within cubic bounds or spherical bounds (round rocks or straight rocks).

**Dimensions (If Type is Vector3)** – The dimensions that the rock will have.

**Radius (If Type is Spherical)** – Radius that the rock will be generated within.

**Seed** – Seed that controls randomness. Same parameters + same seed = same rock.

## Buttons

**New Rock** – Generates a new random rock with the current parameters. (modified seed)

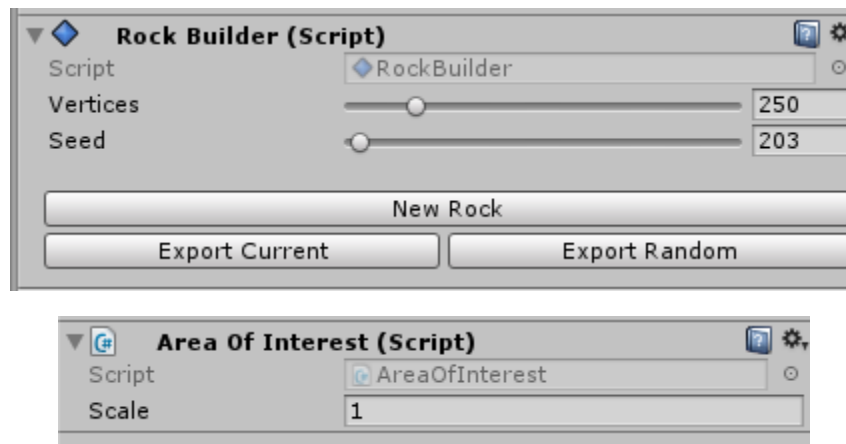
**Export Current** – Saves the rock currently assigned to the generator.

**Export Random** – Same as above, but generates a random rock first. Use it when you want similar variations!

## Rock Sculptor

You can find a prefab already setup in the “Quickstart/Examples” folder with the name “Rock Sculptor”. In case the prefab is corrupted because of Unity version changes, do the following:

- Create > 3D Object > Cube
- Add Component > Rock Builder
- 3x : Create Empty > Add Component > Area Of Interest
- Make the 3 objects you created children of the cube
- Add some space between the 3 objects
- Hit Preview Random in the Rock Builder component



Keep the cube/sculptor at position (0, 0, 0). Only move the child objects!

You can add **as many** Areas Of Interest / Point Clouds **as you want**. 3 Was just as an example

The buttons and parameters are the same as in the **Rock Generator** component.

## Runtime Generation

You can generate rocks at runtime using the provided APIs. First, you need to generate the vertices. Then, you create a convex mesh from the vertices and apply it to your filter. There's an example script doing just this: it's located inside "QuickStart/Examples" and it's called "RuntimeRock.cs".

Here are the functions you can use to generate vertices at runtime:

**VertexGenerator.PointsFromSize(vertices : 250, size : new Vector3(1, 1, 1));**

**VertexGenerator.PointsFromRadius(vertices : 250, radius : 3);**

Don't forget to cast the output to **List<Vector3>!**

To generate a mesh out of a list of vertices:

**VertexGenerator.MeshFromPoints(vertices);**

If you'd like to hook it up to the included exporter, use:

**MeshExporter.ExportMesh(mesh);**