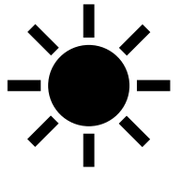
## Sensor & Sunlight

**Sensor.py**

```
#Sensor parameters

azimuth = uniform()
look_angle = gaussian()
gsd = uniform()
...
```



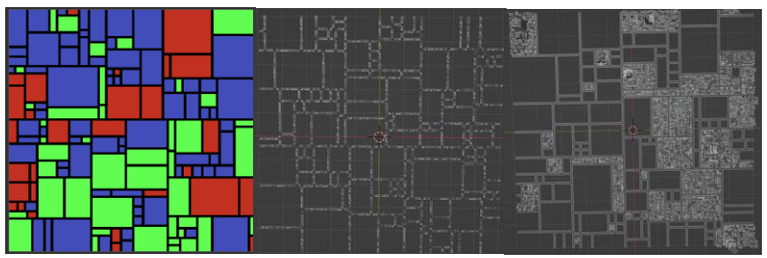
**Sun.py**

```
#Sunlight parameters

elevation = uniform()
intensity = uniform()
color = [uniform(),uniform(),uniform()]
...
```

## Layout

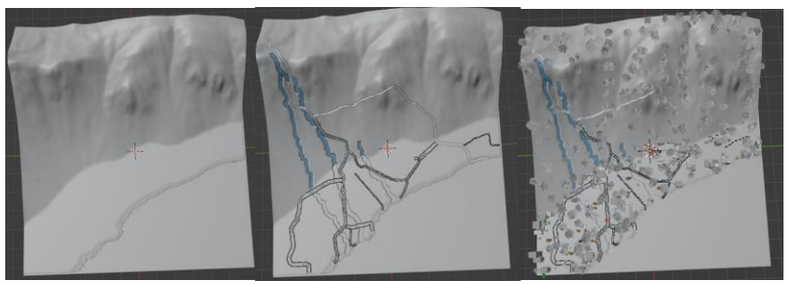
**Grid_based.py**

```
#Grid-based parameters

district_num = randint()
district_size = randint()
obj_density = uniform()
...
```



**Terrain_based.py**

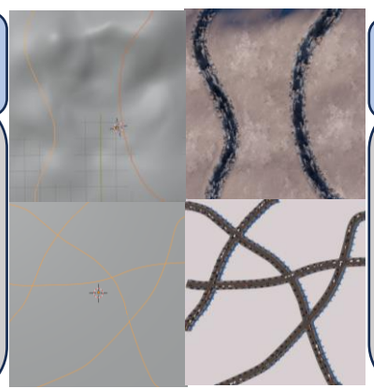
```
#Terrain-based parameters

flat_area = uniform()
mountain_area = uniform()
tree_density = uniform()
...
```



## Geometry

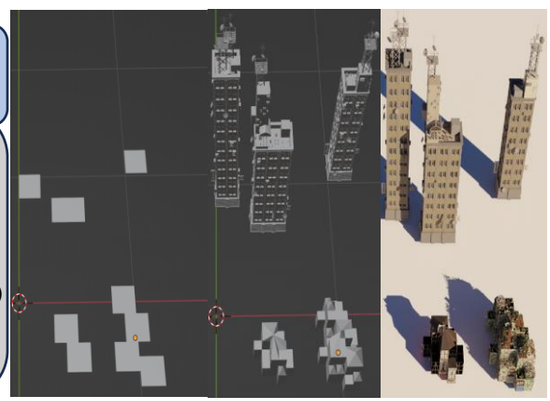
**Road/River.py**

```
#Road/River parameters

river_num = randint()
road_num = randint()
width = uniform()
...
```



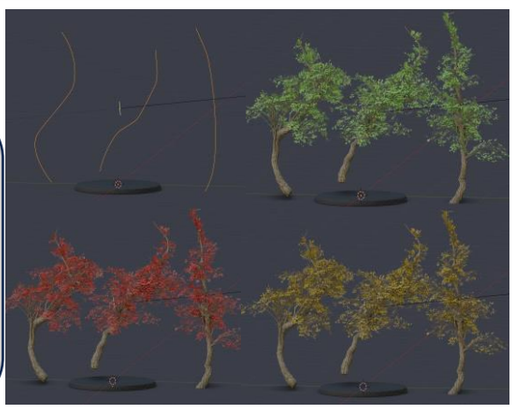
**Building.py**

```
#Building parameters

height = uniform()
type = select()
roof_angle = uniform()
...
```



**Tree.py**

```
#Tree parameters

trunk = Sample_Noise()
branch_num = randint()
leaf_num = randint()
...
```



## Texture

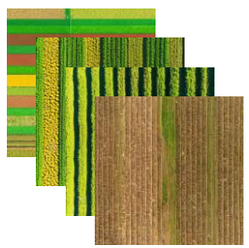
Manual

GPT-4

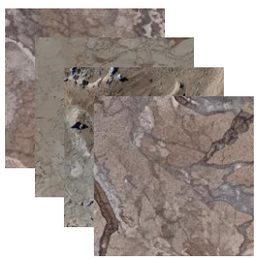
Prompts

Stable Diffusion

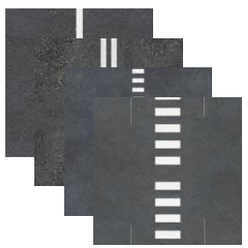
*Rangeland*



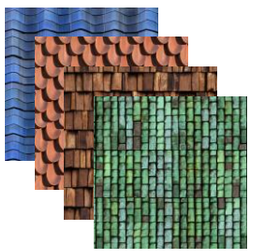
*Agriculture land*



*Bareland*



*Road*



*Roof*

...