Procedural Texture Particles

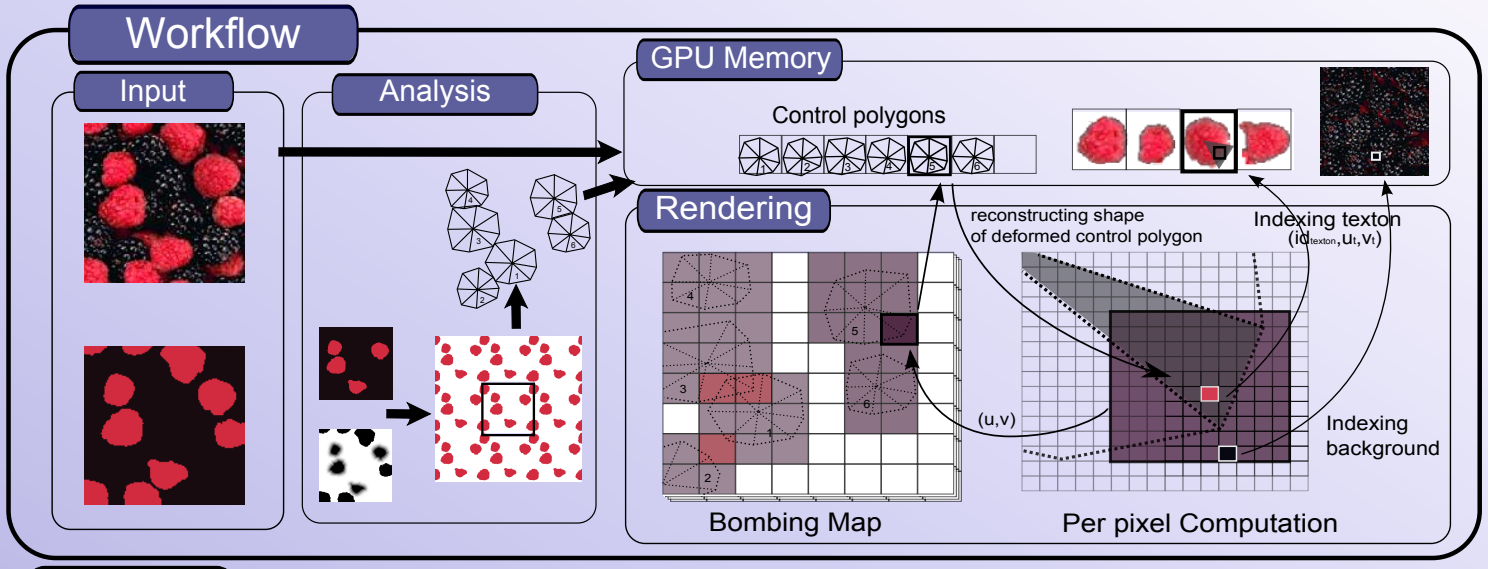
G.Gilet JM. Dischler

Laboratoire des Sciences de l'Image, de l'Informatique et de la Télédétection
Université de Strasbourg, France

Objectives

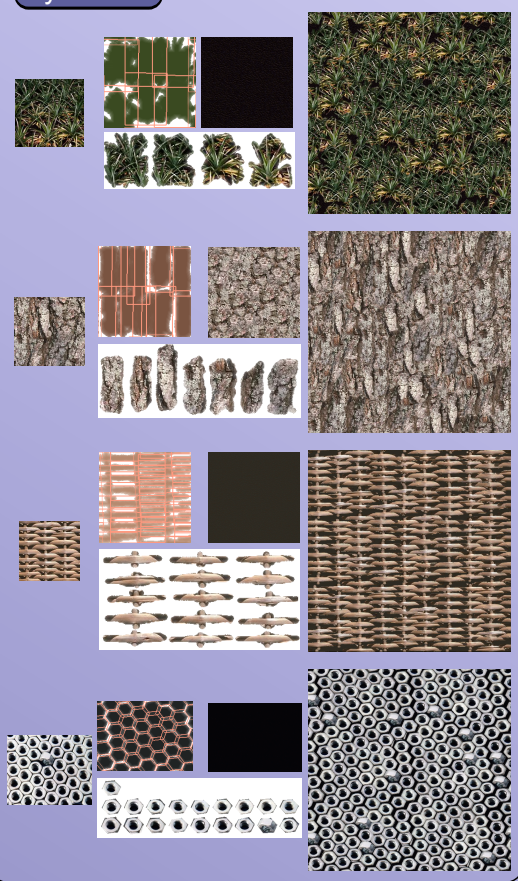
Representing textures as a procedural distribution of interchangeable elements using a single example. This compact semi-procedural representation can be used to automatically synthesize infinite textures at real-time framerates without repetitions.

Workflow

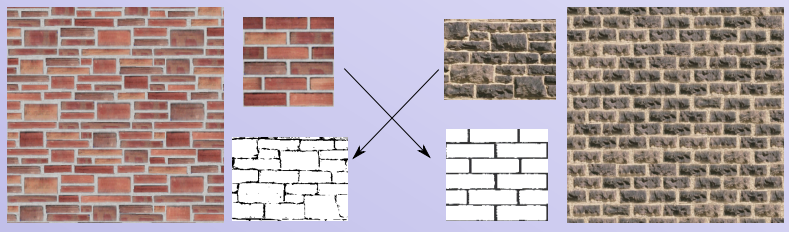


Results

Synthesis

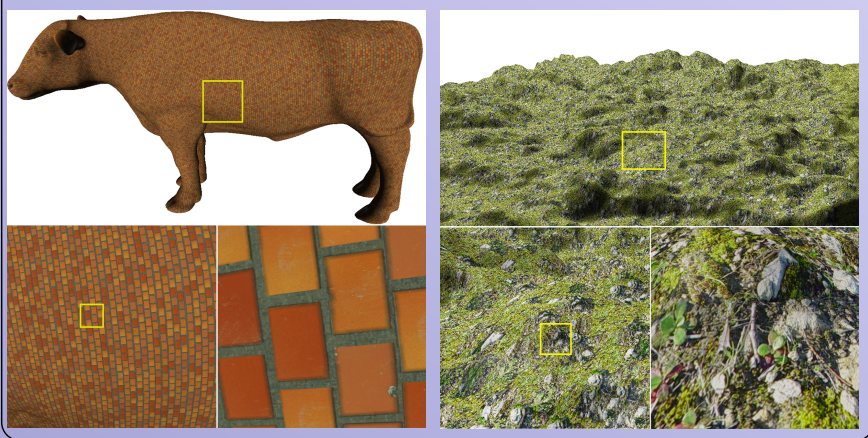


Extended control



High apparent resolution

Composite textures preserve original particles resolution, yielding textures with huge apparent resolution (3.0M * 3.0 M) at 25 fps



References

DISCHLER, J.-M., MARITAUD, K., LEVY, B., AND GHAZAN-FARPOUR, D. 2002. Texture particles. Computer Graphics Forum 21, 3, 401–410.
EBERT, D., MUSGRAVE, K., PEACHEY, P., PERLIN, K., AND WORLEY, S. 1998. Texturing and Modeling: A Procedural Approach.