Procedural Generator of 3D Voxel Maps

Otakar Kočí

Supervisor: Ing. Michal Vlnas

World Generator

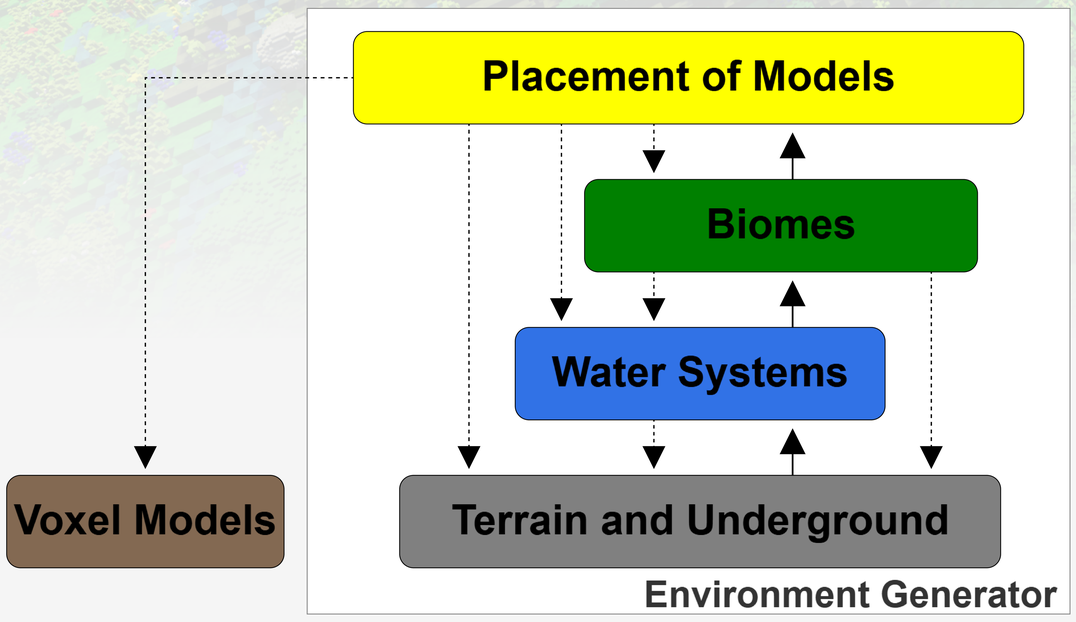

Figure 1: World generator architecture.

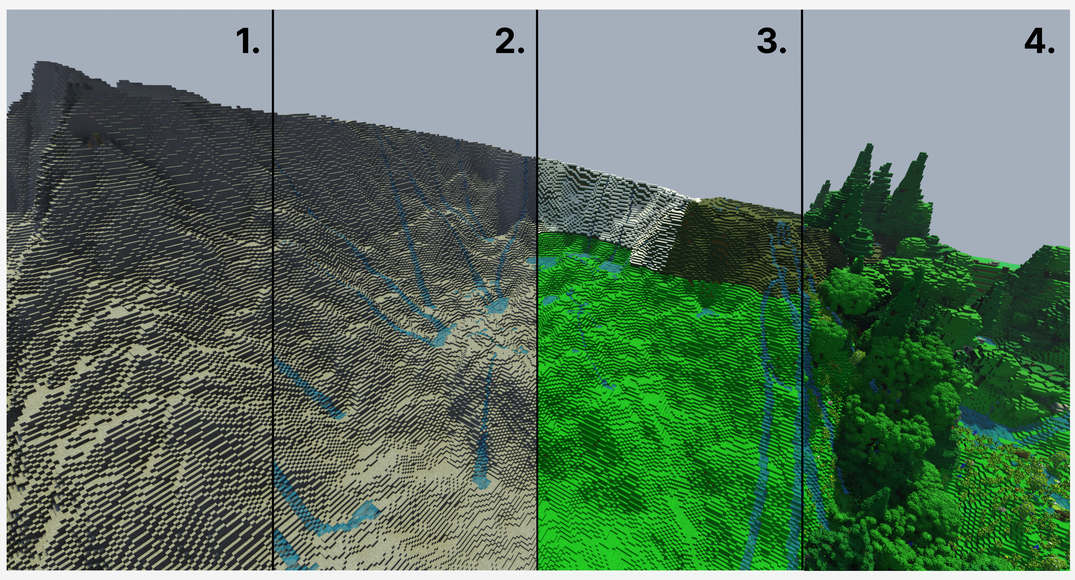

Figure 2: World generation steps.

Demo Implementation

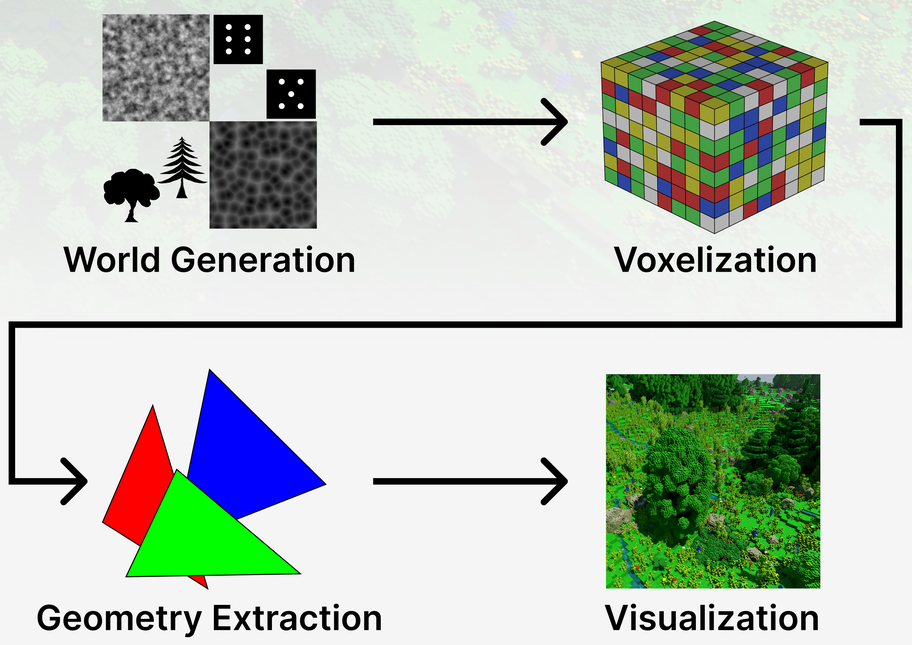

Figure 3: Demo architecture.

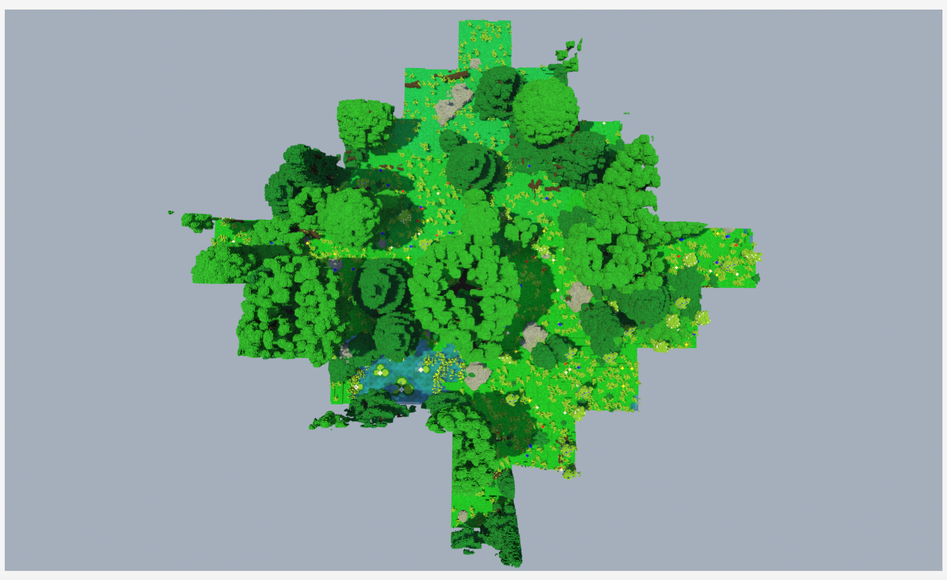

Figure 4: World segmentation visualization.

Generator Capabilities

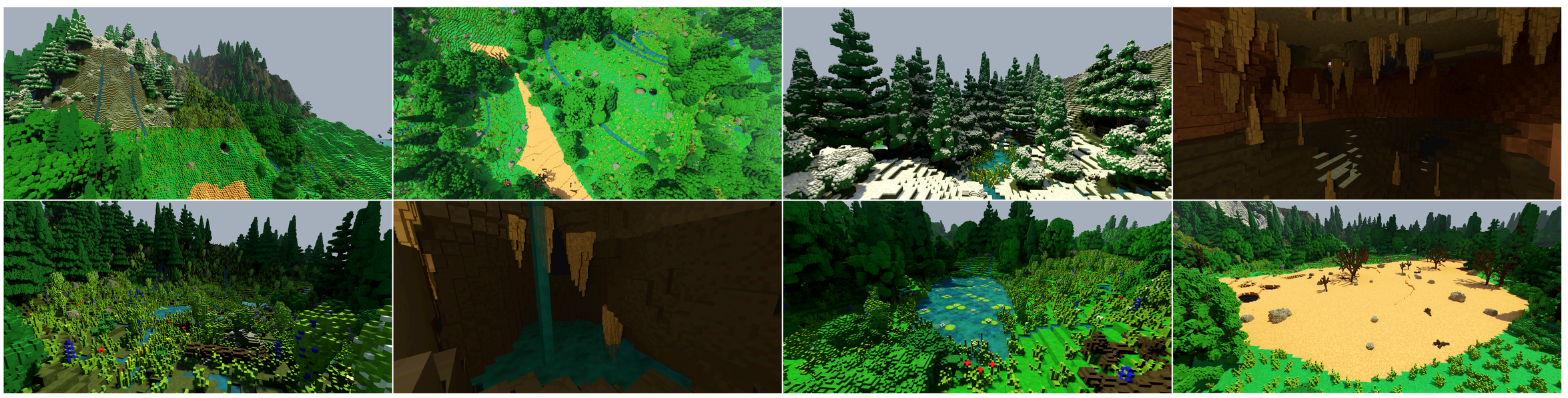

Figure 5: Showcase of generated environments.

BRNO UNIVERSITY OF TECHNOLOGY
FACULTY OF INFORMATION TECHNOLOGY

Excel@FIT 2026