Tabby

Explorable Design for 3D Printing Textures

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However, texture pattern creation is difficult
2. Related Work

3. Design Goals

4. System and Implementation

5. Conclusion
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User-Centered Design Approach

1. 3D Printing Workshop with 25 novice users
2. Observation with 3 professional CAD users
1. Exploiting 2D Operations
2. Liberating from Repetitive Operations
3. Allowing Intuitive Exploration
4. System and Implementation
1. Pattern Auto-Completion
2. Semantic Region Selection
3. Texture Mesh Generation
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2. Semantic Region Selection

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Contributions

1. **Tabby**, an interactive system that instantiates the auto-completion method in the context of 3D texture design

2. A set of workflow and techniques that support 2D operations for designing 3D-printable texture patterns;

3. A controlled experiment with seven designers that shows users can efficiently and flexibly design textures compared to conventional tools
Thank you