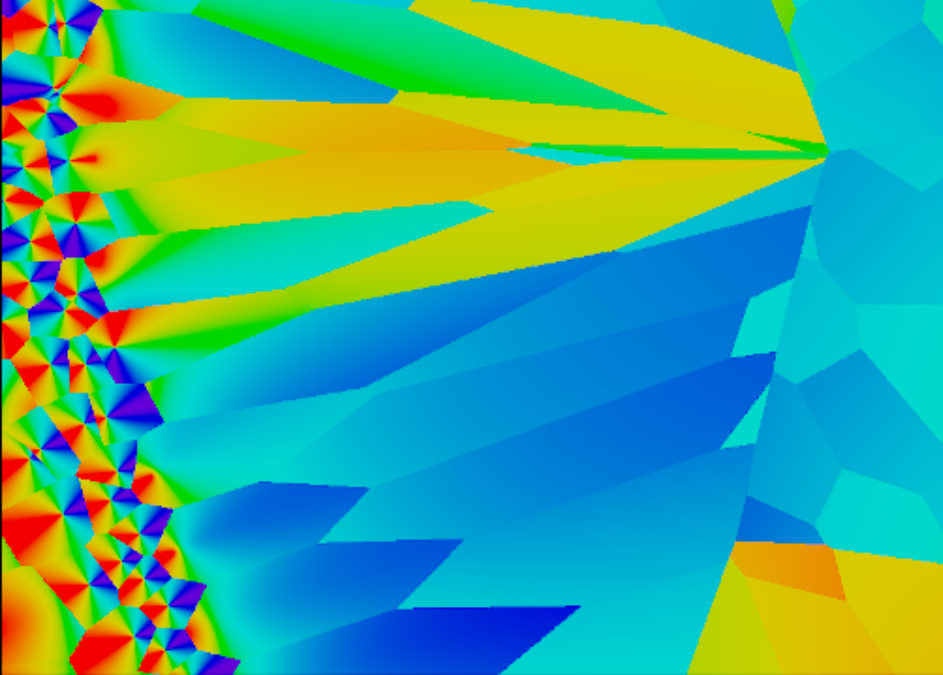




# Technical 3D Artist

Procedural Modeling

Rendering and Texturing

Tool Building and Automation

## CV

Dipl.-Ing. Konstantin Magnus Lucke  
\* 29.1.1985 in Bonn, Germany

## Work

- 2022 - 2023      **Technical Artist:** Houdini Procedural Modeling, Synthetic Data for ML  
Google LLC (AR), Mountain View, CA (Remote Freelance)
- 2012 - 2022      **Research Assistant** at CAD Lab: 3D Scanning/Printing, VR  
Faculty of Architecture and Urban Planning, University of Stuttgart, Germany
- 2018 - 2020      **CGI-Specialist** / Pre-Development: PBR-3D-Scanning  
Carl-Zeiss-AG, Oberkochen, Germany
- 2012 - 2018      **Freelance 3D Artist** and Trainer, Stuttgart, Germany  
Architectural Visualization and Product Commercials
- 2010 - 2012      **3D Artist:** Architectural Visualization  
Formstadt Architekten und Ingenieure, Munich, Germany

## Education

- 2005 - 2010      Study of Architecture, Diploma of Engineering  
Faculty of Architecture and Urban Planning, University of Stuttgart, Germany
- 2001      Autumn Term in Rydal-Penrhos, Boarding School in Colwyn Bay, Wales UK
- 1995 - 2004      Collegium Josephinum Bonn, Germany (High School)

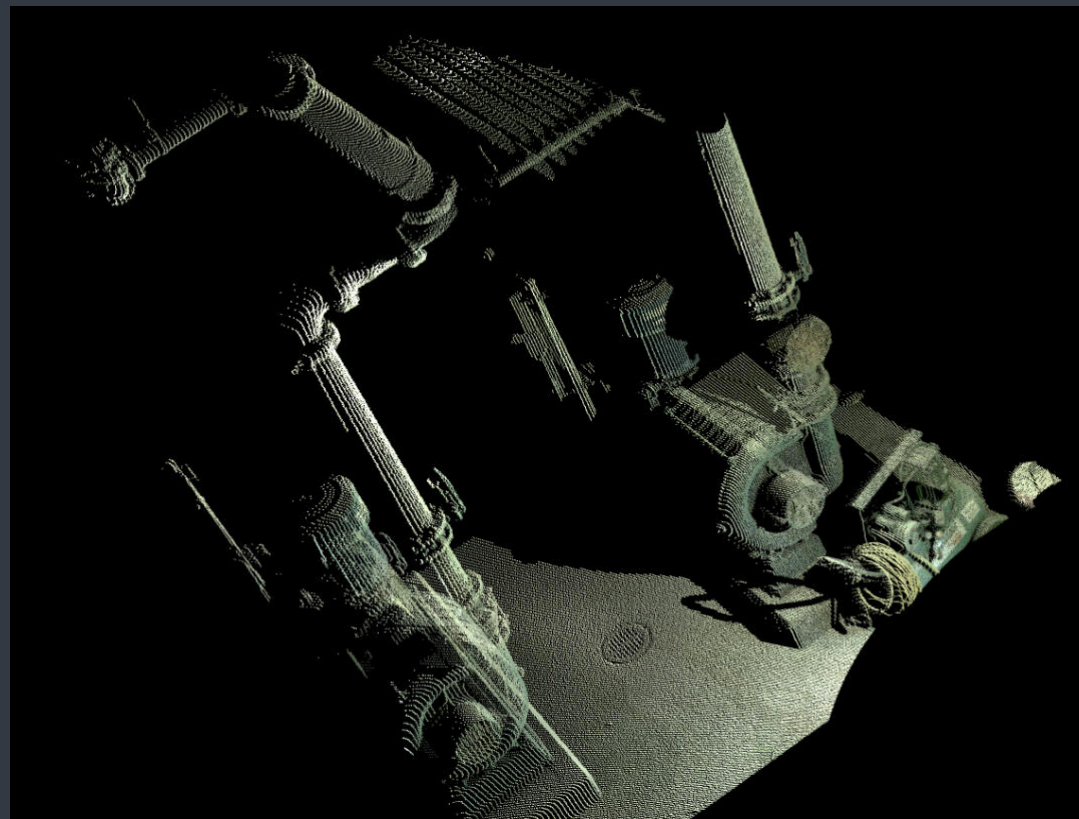
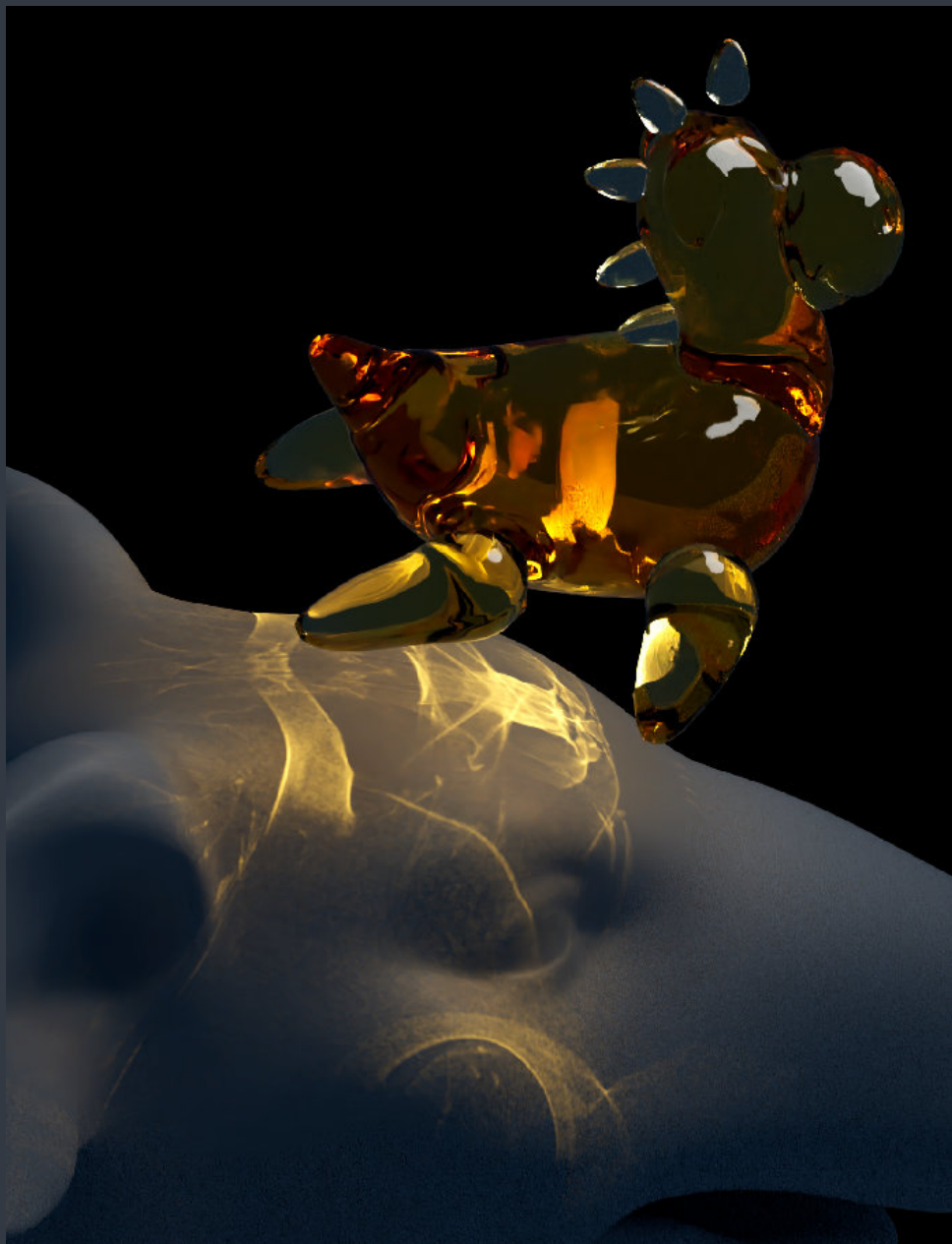
## Skills

- Houdini      Procedural Modeling, Texturing, Rendering, USD, PDG / Automation  
Programming      VEX, Python, OpenCL

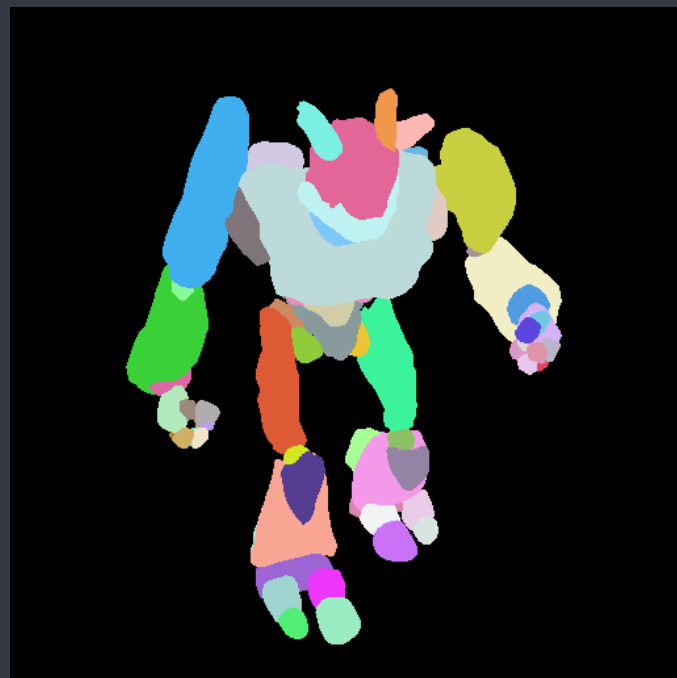
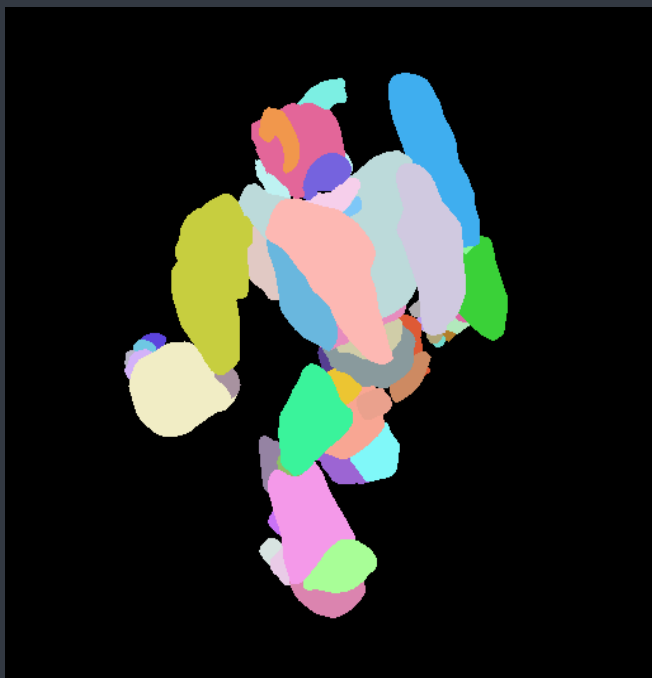
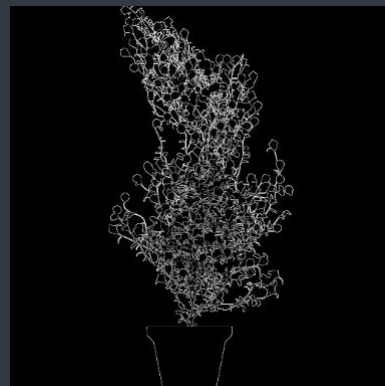
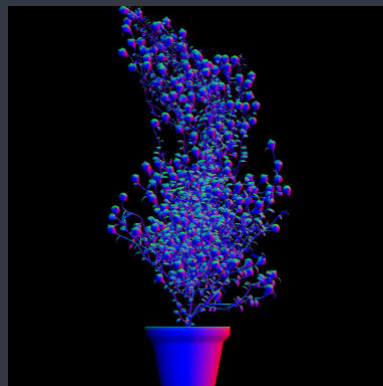
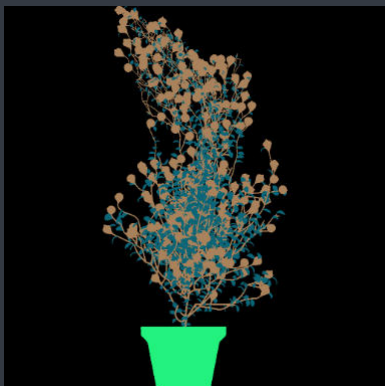
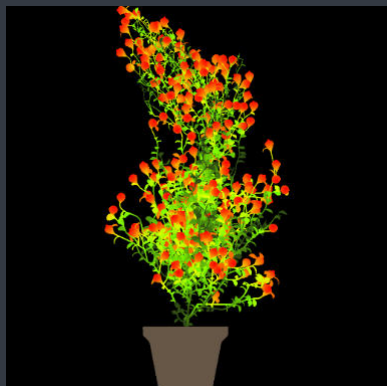
## Contact

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73525 Schwäb. Gmünd  
Tel: 0170-9626553
- Mail:      km@konstantinmagnus.de  
Website:      www.konstantinmagnus.de  
Vimeo:      vimeo.com/konstantinmagnus  
Youtube:      youtube.com/konstantinmagnus  
**Houdini:**      **<https://procegen.konstantinmagnus.de/>**  
LinkedIn:      linkedin.com/in/konstantin-magnus-lucke/

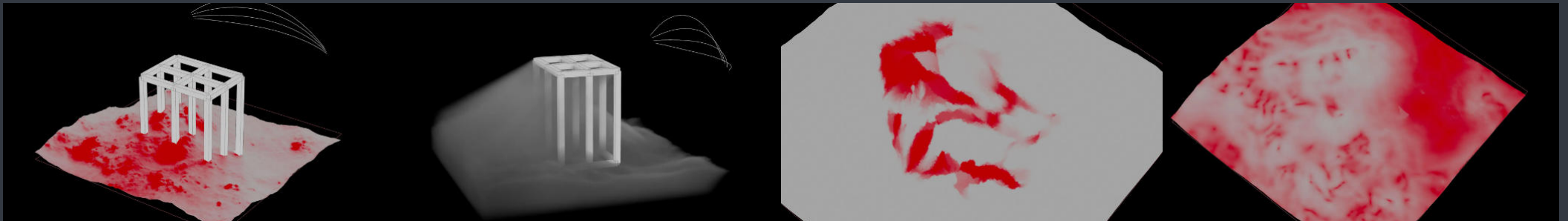
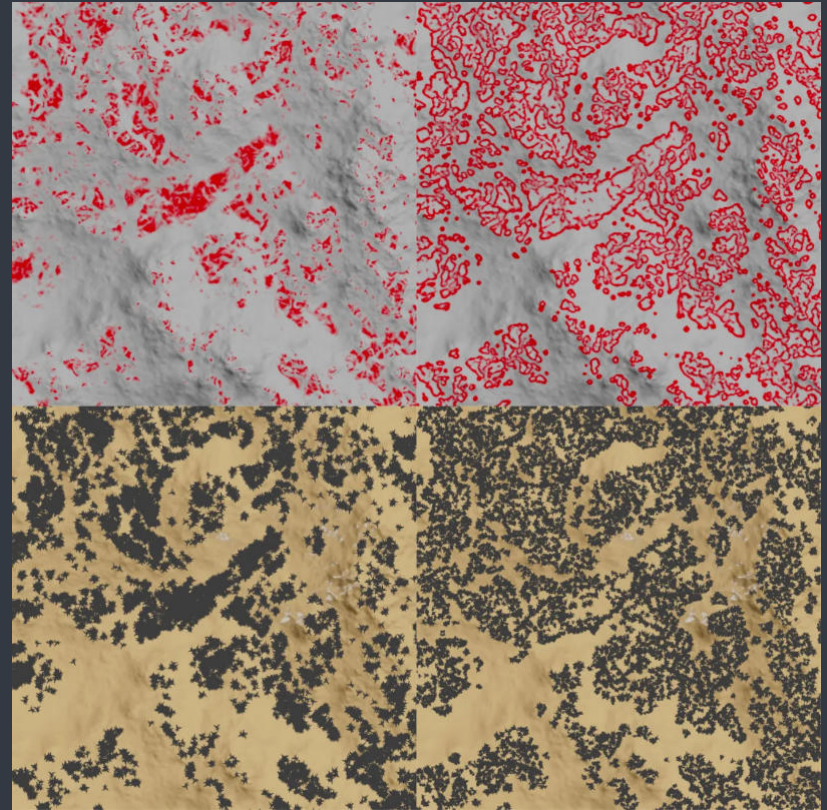
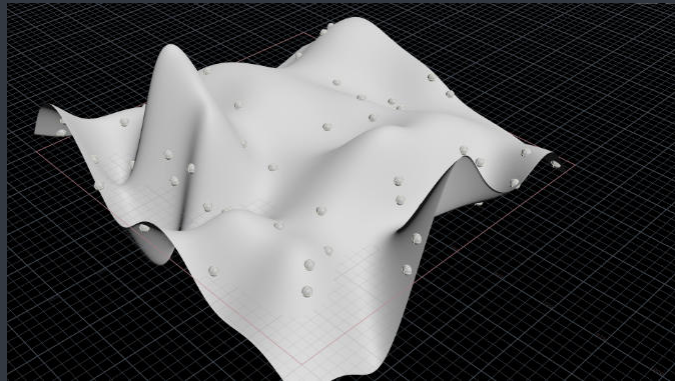
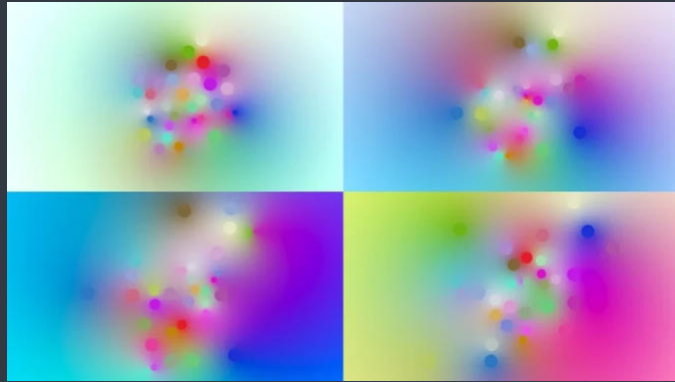
# Point Clouds // Caustics maps solver using VEX, Scanning Data Import using Python



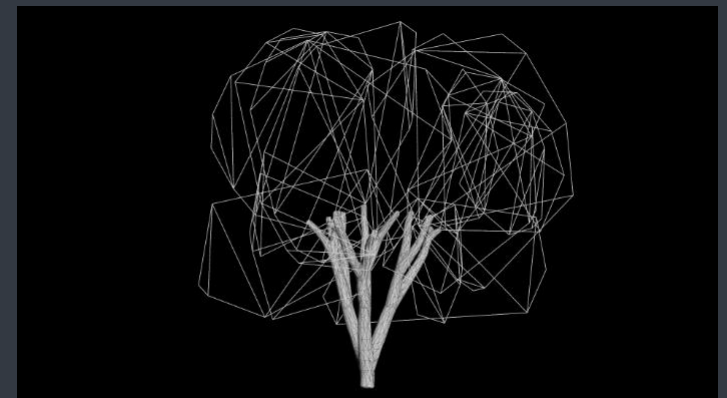
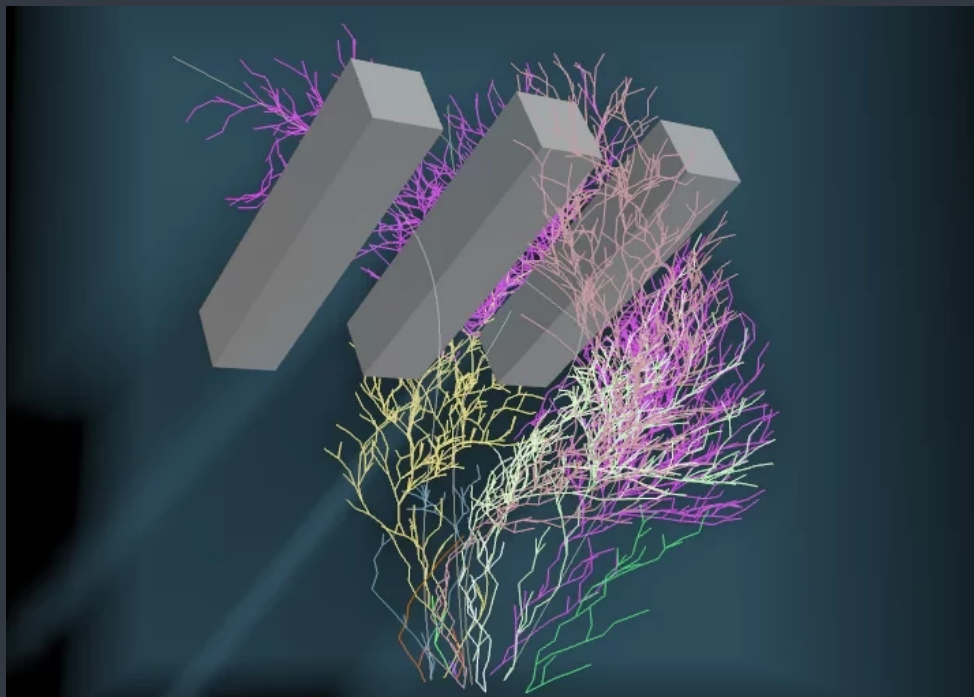
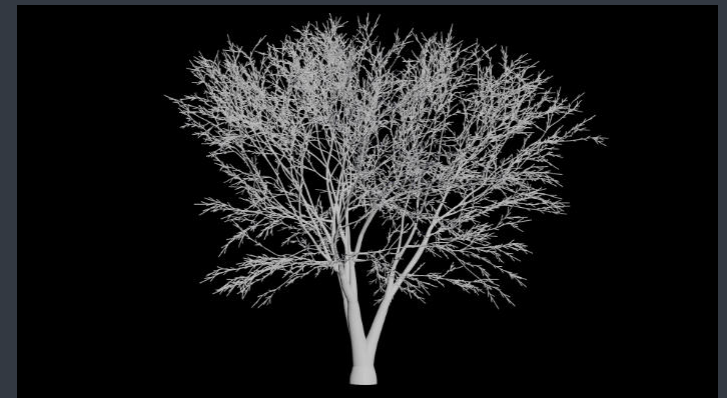
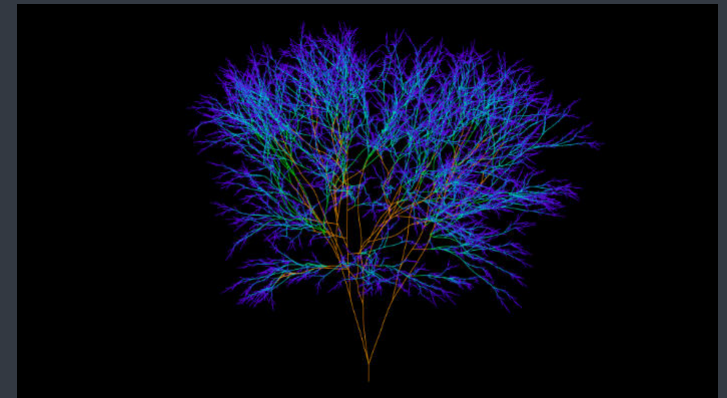
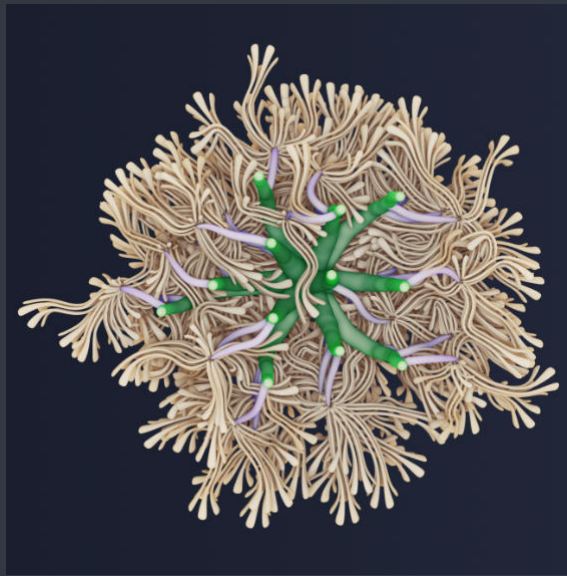
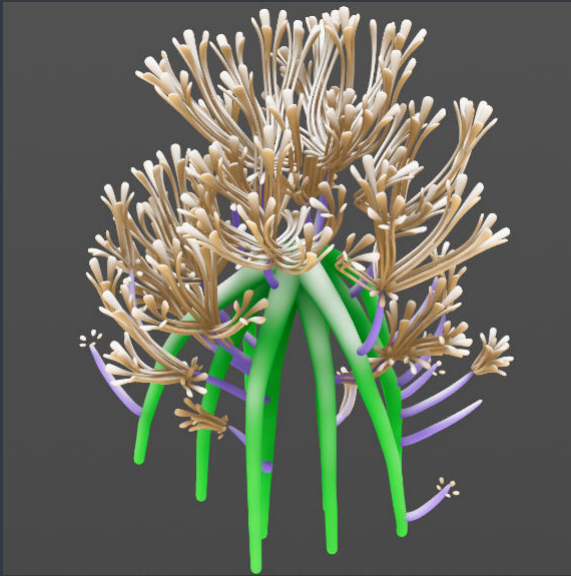
# Training Data // Custom raytracing and image segmentation for Machine Learning / AI.



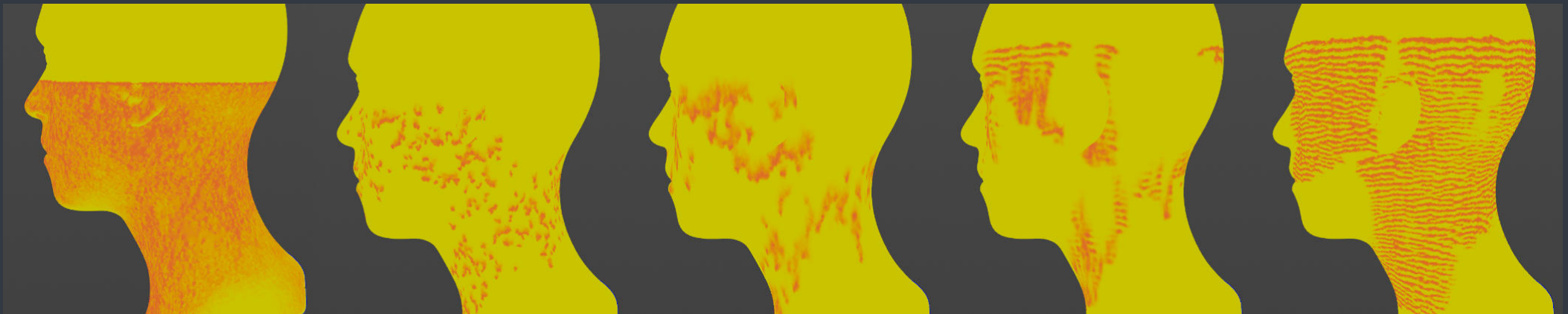
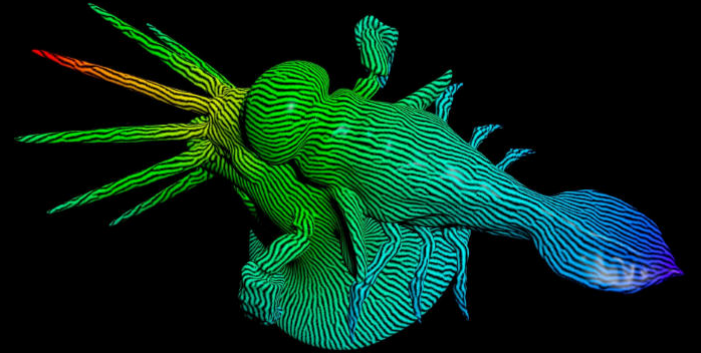
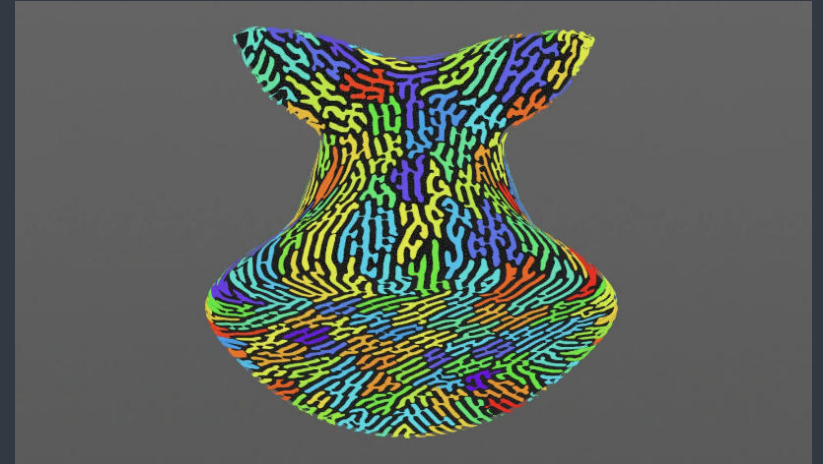
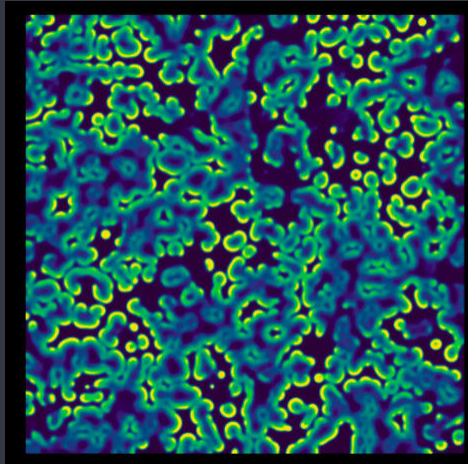
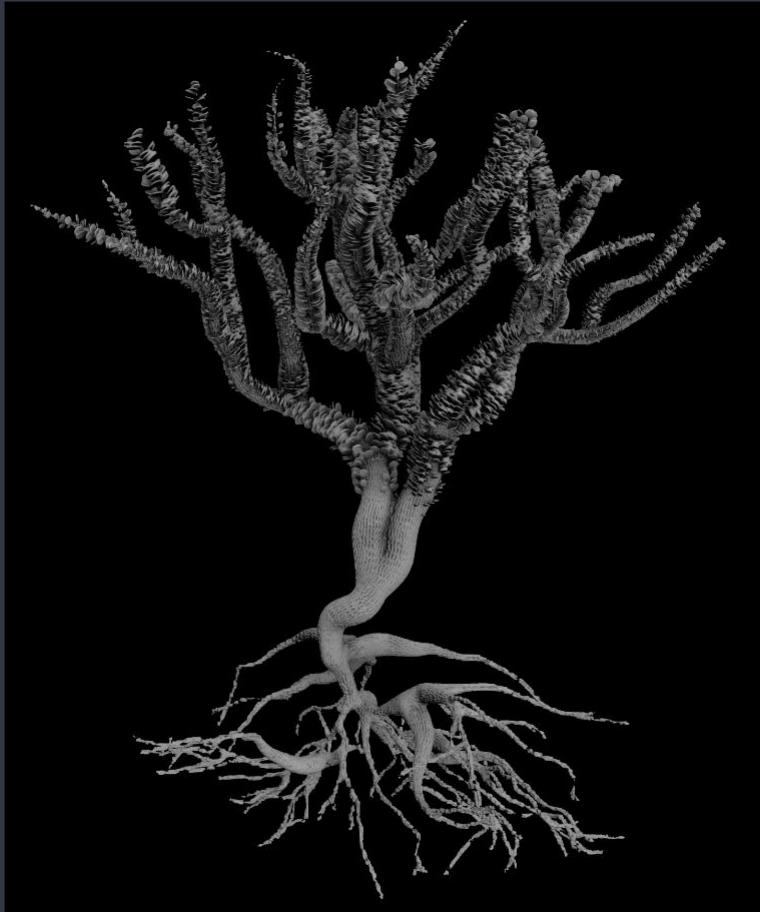
# Terrain Building // Multivariate interpolation from landmark points, plants dispersal simulation and custom mask solvers.



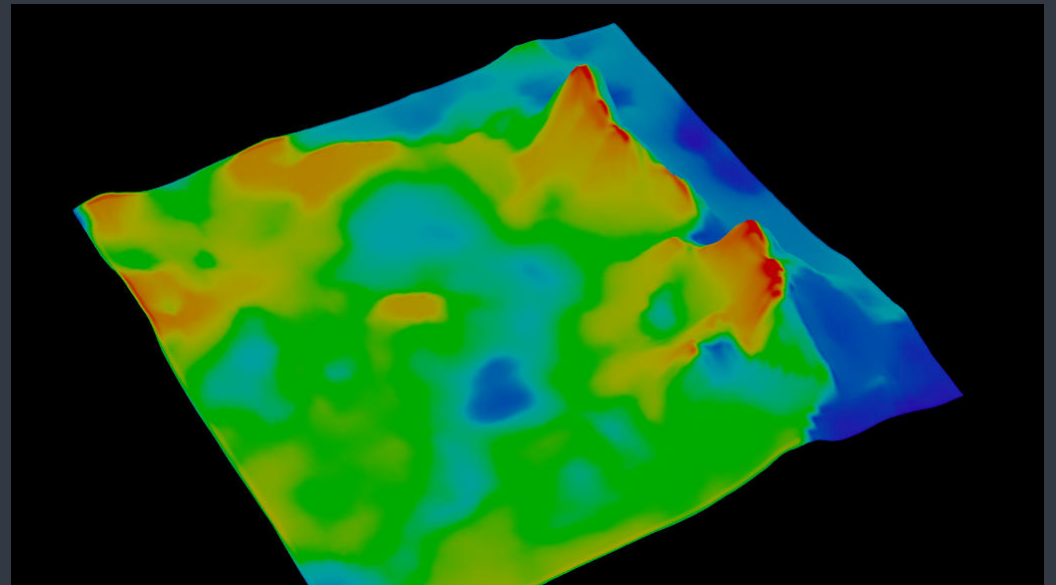
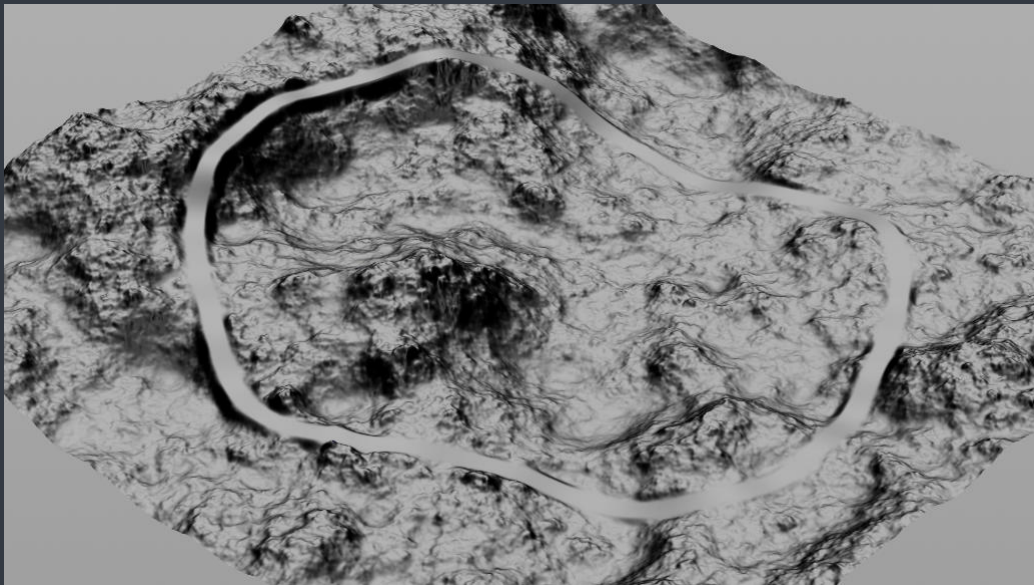
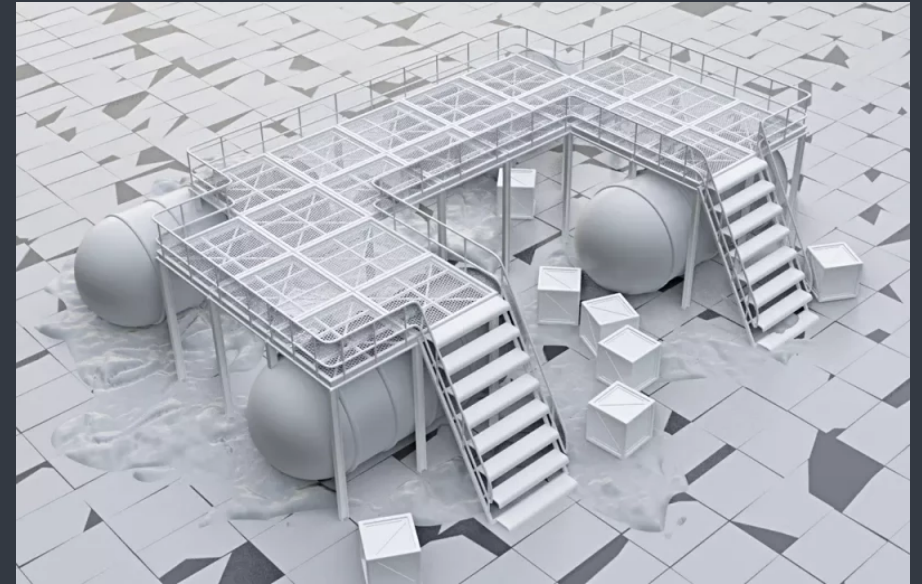
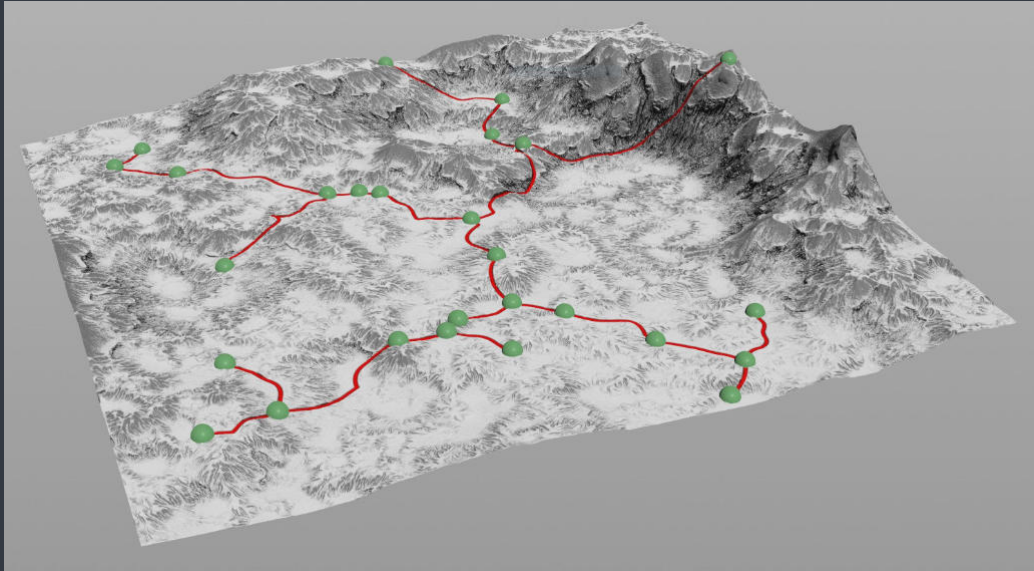
# Tree Networks // Light-guided networks using volume advection, analyzing/traversing networks for clustering and geometry reduction.



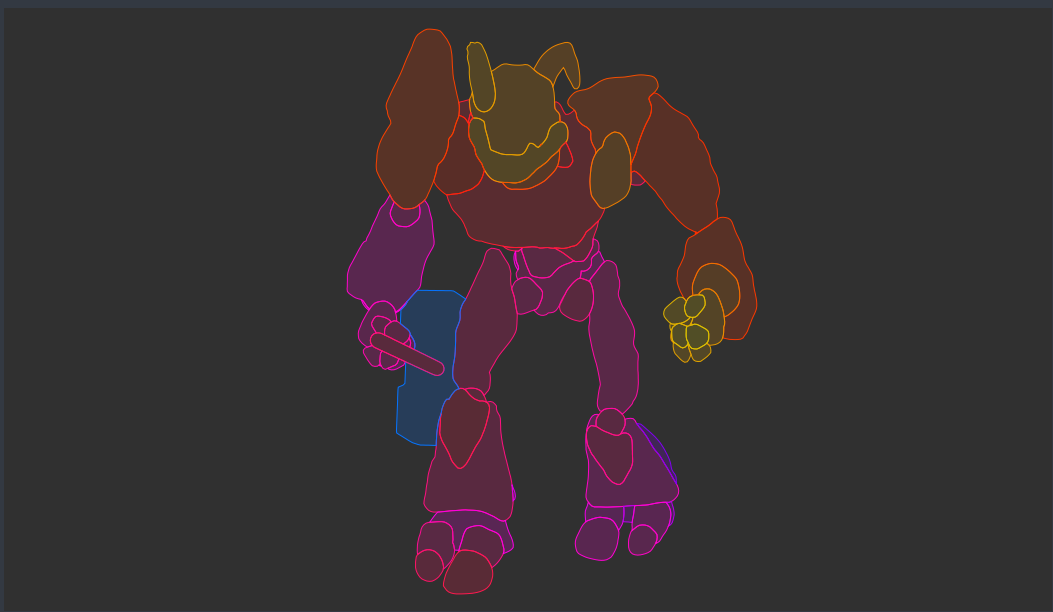
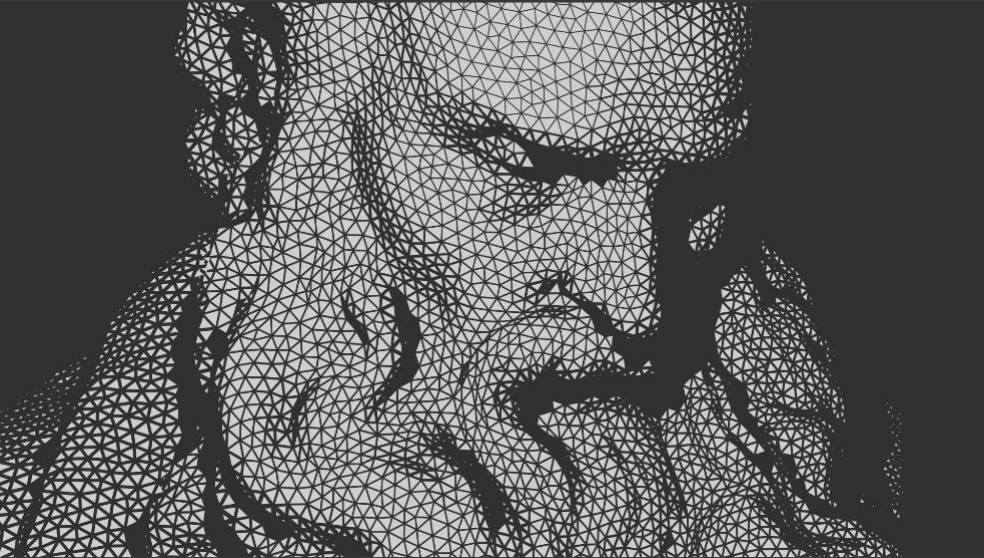
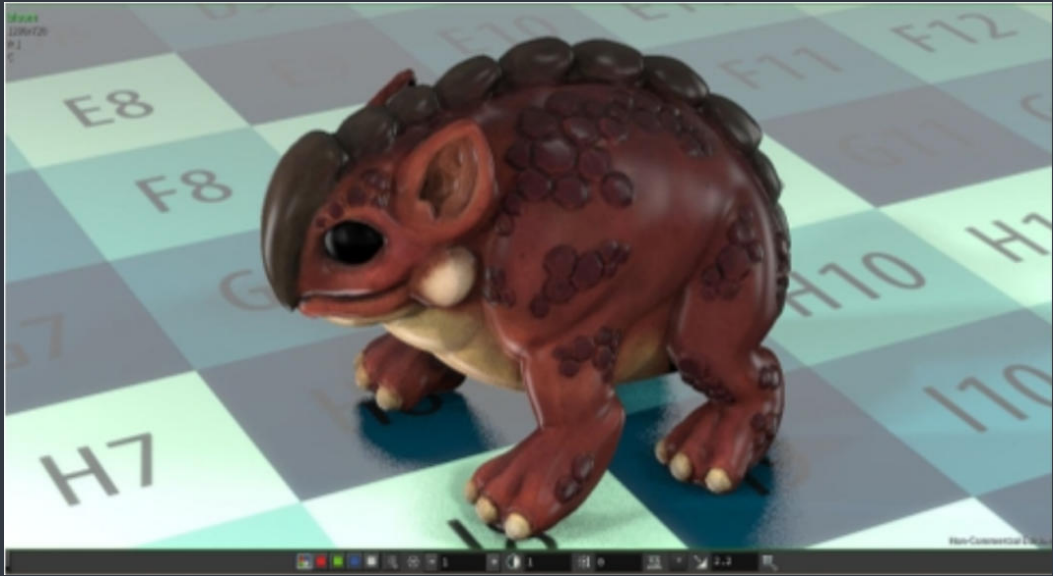
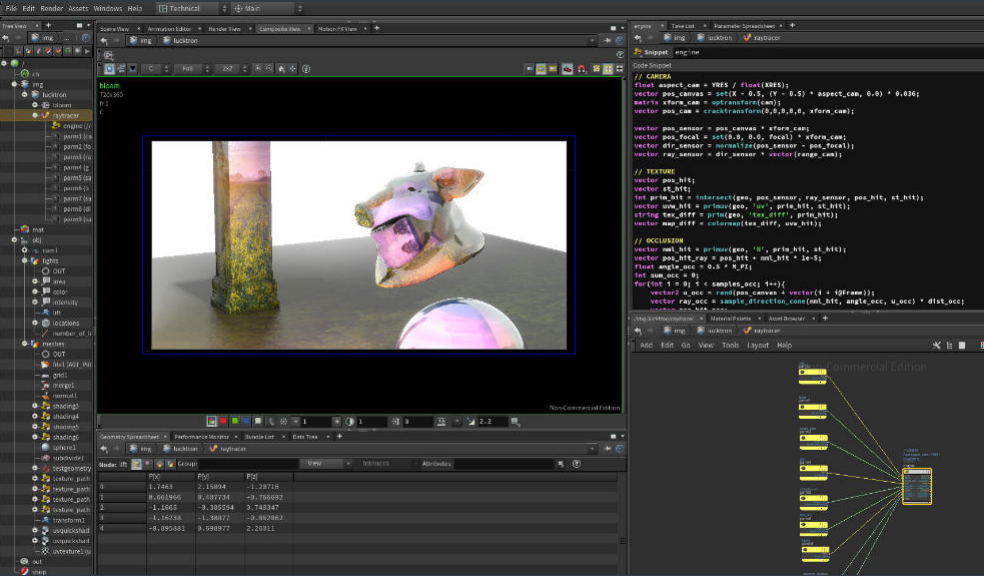
# Surface Structures // Field guided, weighted reaction diffusion for displacements based on surface properties.



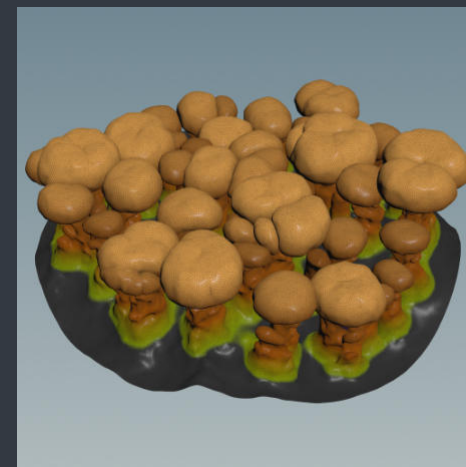
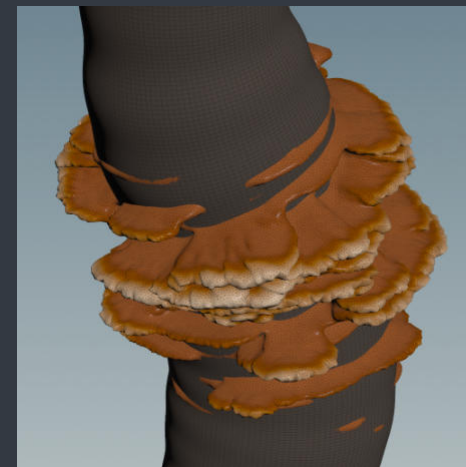
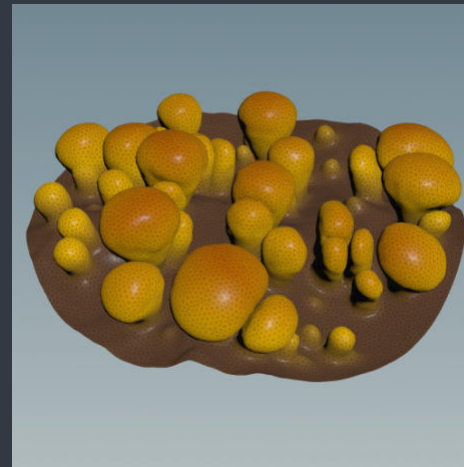
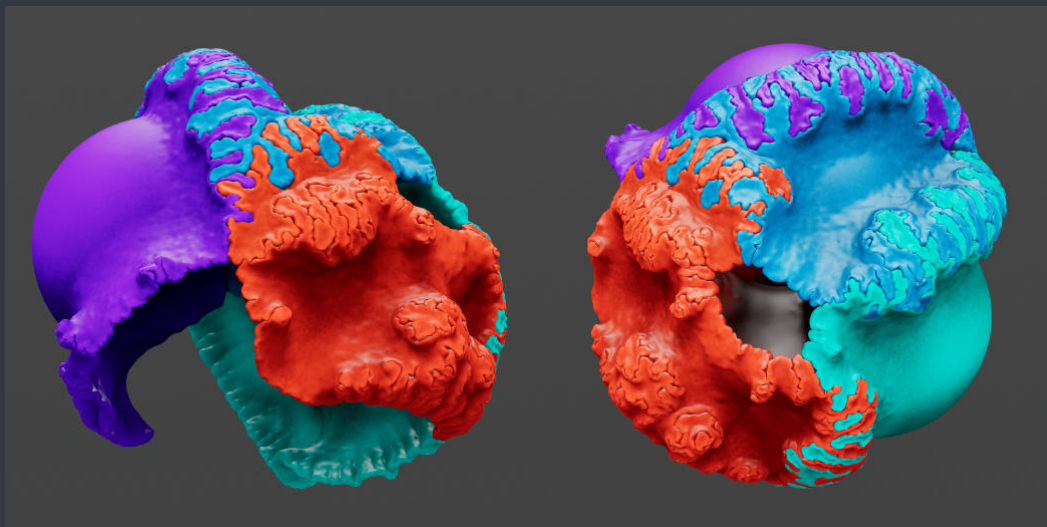
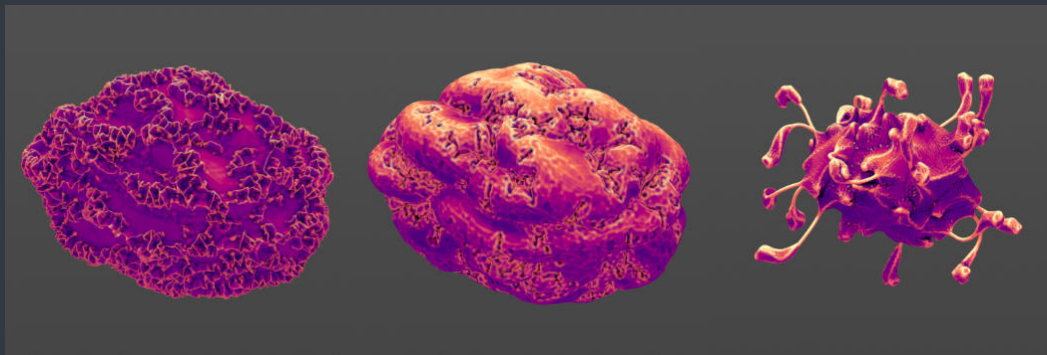
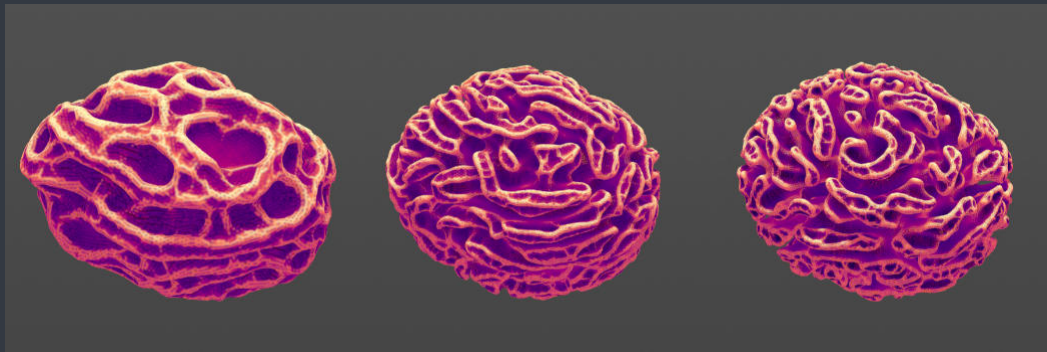
# Road Networks and Modules // Minimal spanning networks, terrain-blending roads, modular buildings, visibility maps.



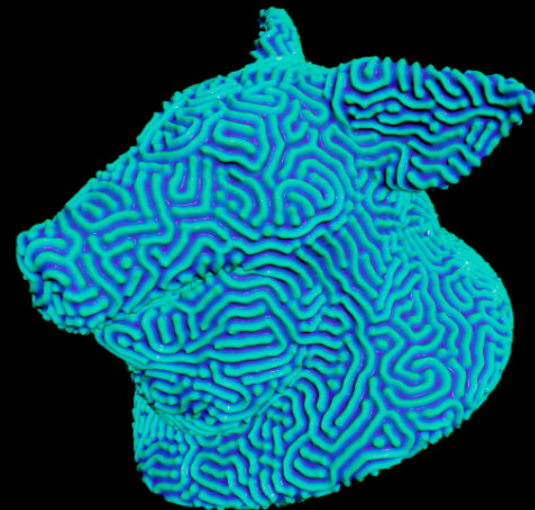
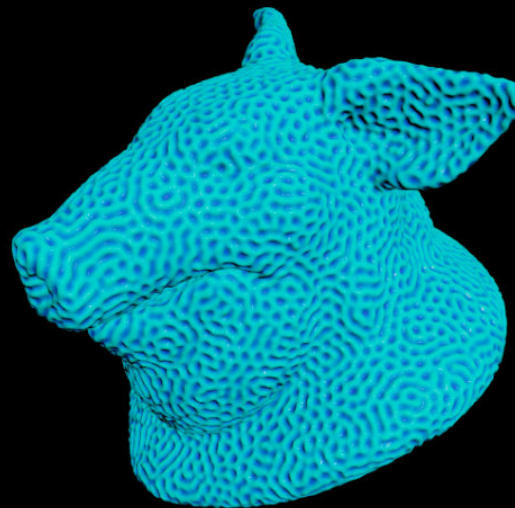
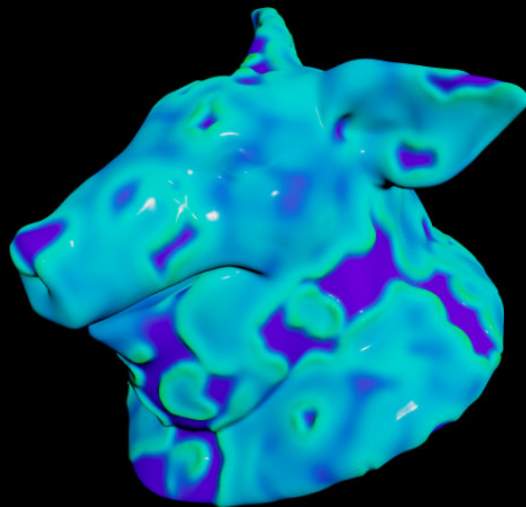
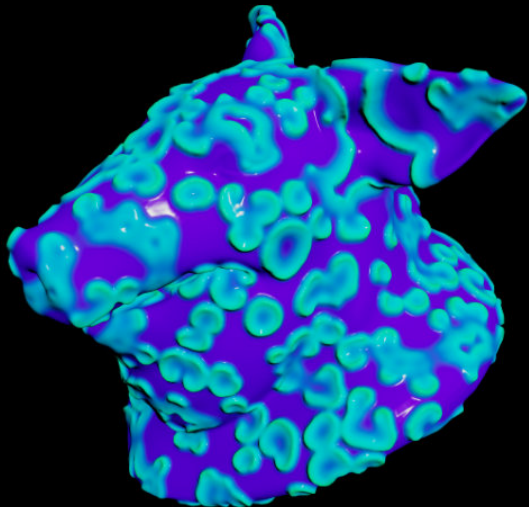
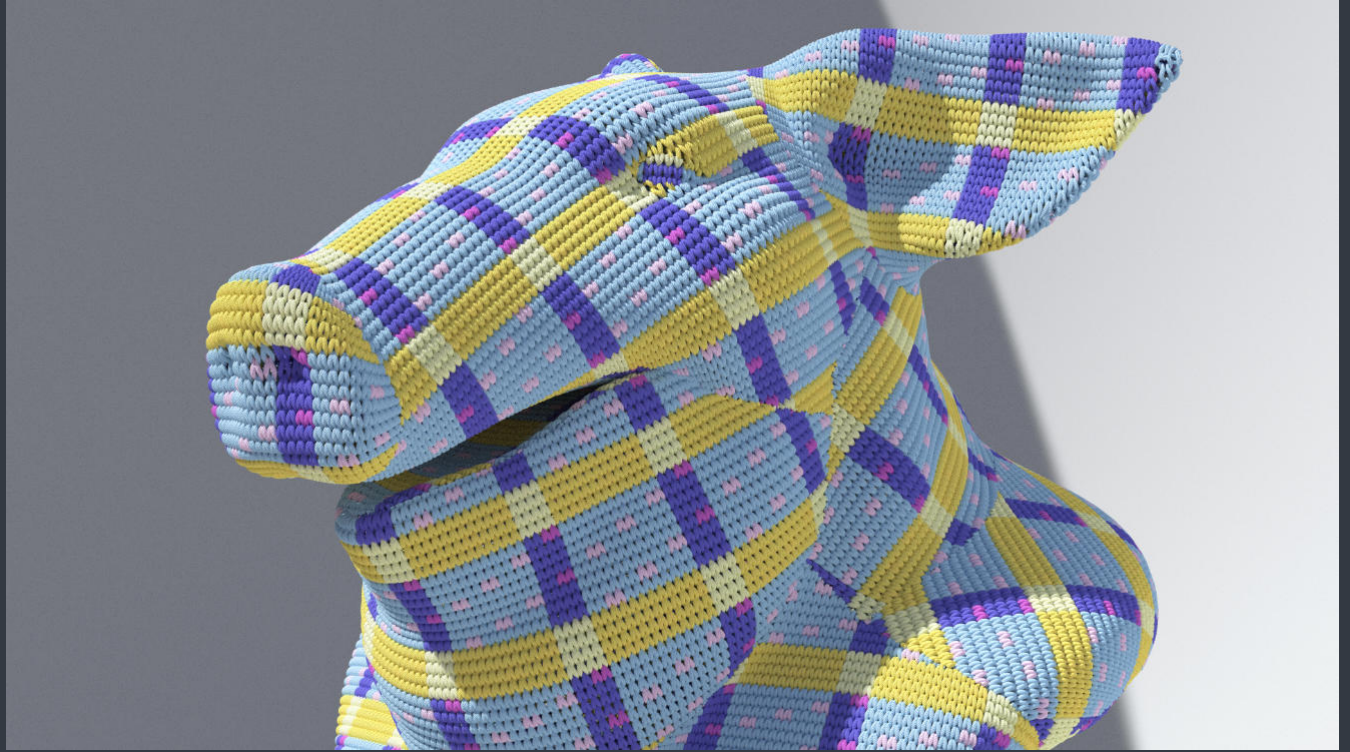
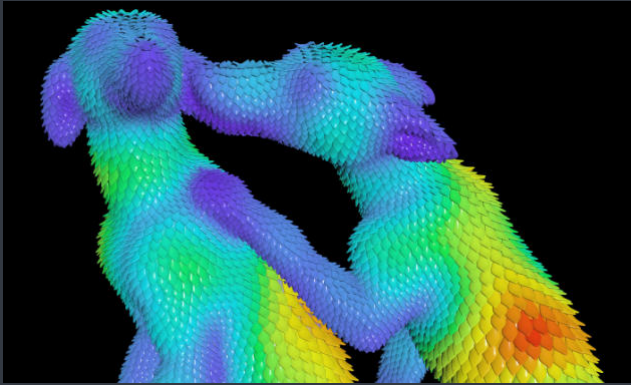
# Custom Raytracing // Raytracer in C++, Shaded 2D triangles for plotting, Python SVG export for websites.



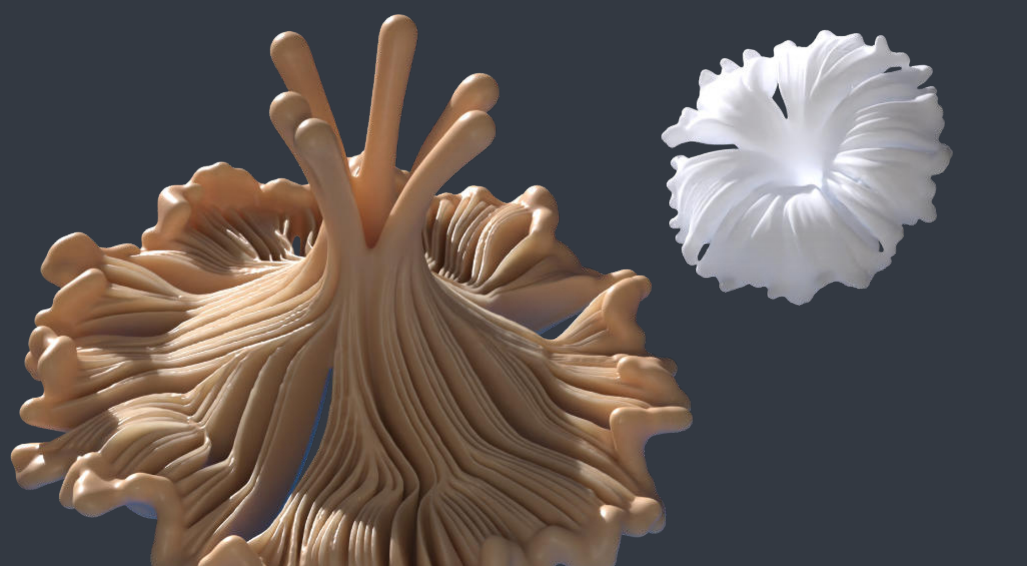
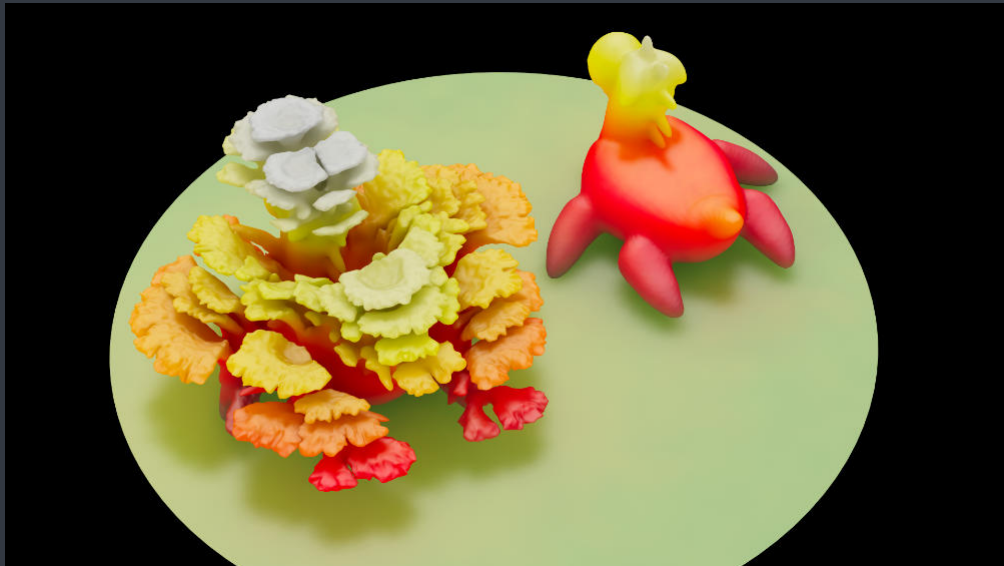
# Mesh Displacements // Iterative growth on mesh surfaces.



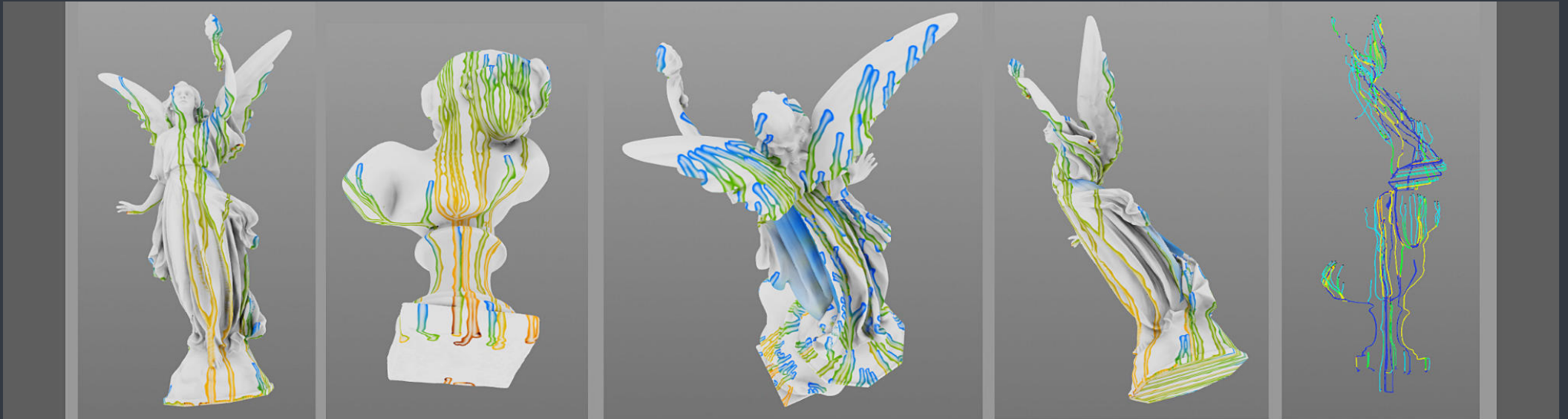
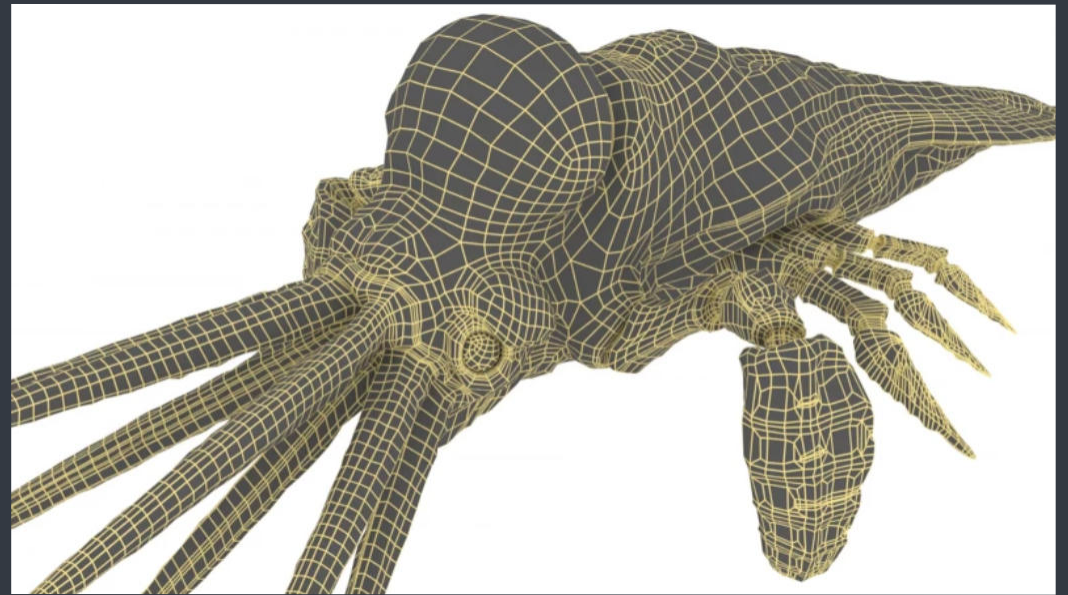
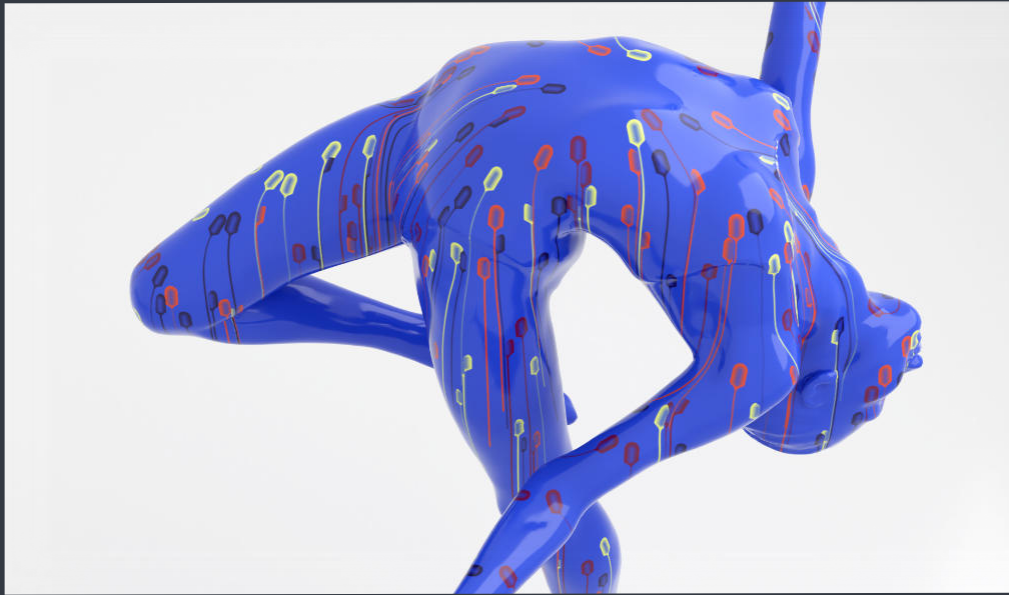
# Surface Population // Stitching voronoi patches, distributing scales, weaving patterns and reaction diffusion.



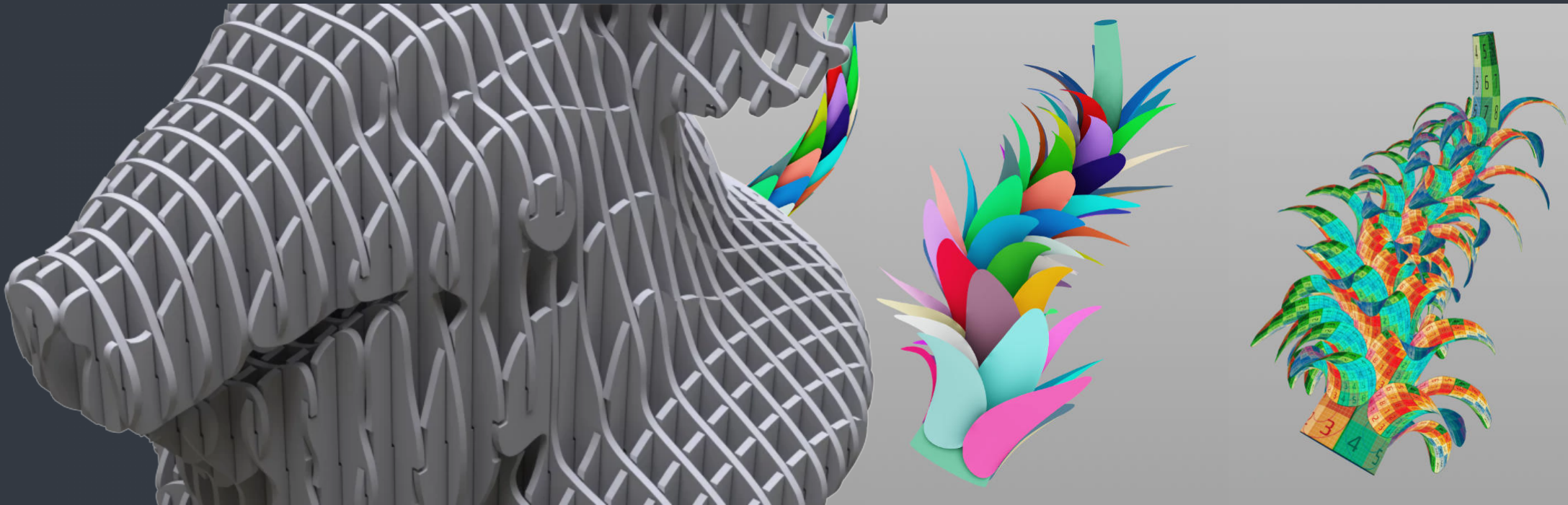
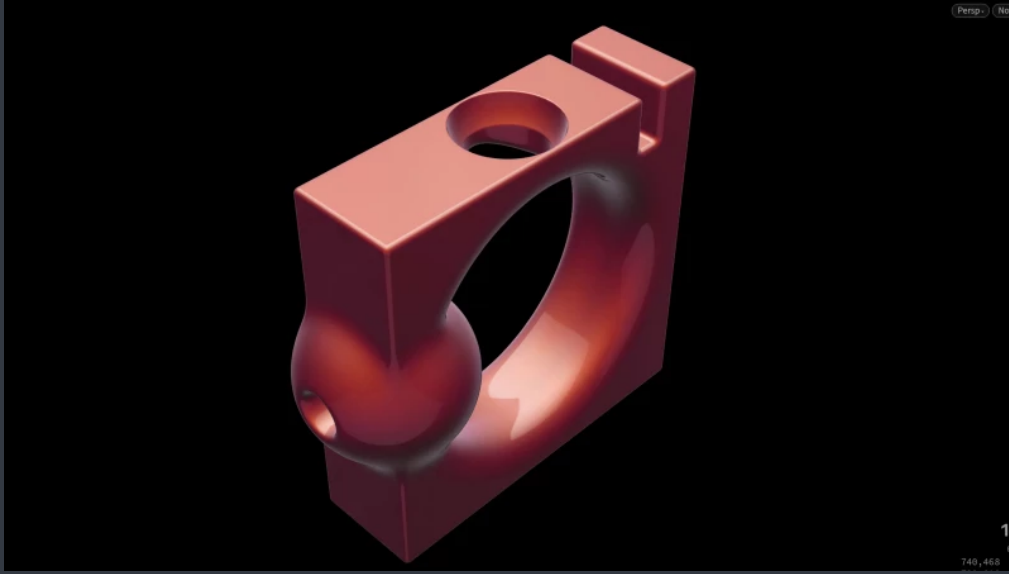
# Organic Surfaces // Liquid shapes without simulation, organs and plant growth setups.



# Texture Generators // Paint and drip solvers, Mantra wireframe shader.



# Tool Building // SDF smooth booleans, image to oil painting converter, geometry conversion, plant rigging.



Contact //

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