

Advanced Materials Science Research

Novel Methods of Working with 3D Bioimaging Data

Abstract

3D Bioimaging data is typically shunted through only a few specialized tools, such as Materialise Mimics. However, by conceptualizing 3D data as simply a list of points in space one can open up a wide array of tools and methods for working with that data and getting to a wider variety of useful outcomes much more quickly. This session will use examples to discuss how imaging data - from CAT scans to 3D surface scans - can be segmented, modified and printed in exciting new ways. Examples include cranioplastic implants, prosthetic legs and novel methods of 3D volumetric segmentation using freely-available software.



Jordan Elevons

Independent Researcher, USA

Biography

Jordan Elevons is a 3D Design Engineer, with a BFA in Industrial Design. He has taught 3d printing and design to the public for over five years, both locally and internationally. Throughout his career, he has worked on a variety of design projects, from automotive to aerospace. He uses a unique blend of software to accelerate innovation in both the physical and digital worlds. In the medical space, he has explored techniques for developing implants using game art tools, new 3d segmentation techniques and is currently developing a low cost, 3d printed prosthetic toolchain for manufacturing in underserved areas. Recently he has been developing designs and distribution methods for fighting the COVID-19 virus.

Annual Summit on Biomaterials and Tissues | Webinar | June 08, 2020

Citation: Jordan Elevons, Novel methods of working with 3D bioimaging data, Annual Summit on Biomaterials and Tissues, Webinar, June 08, 2020, 06