Research outputs:

**Muscle fibre morphology and microarchitecture in cerebral palsy patients obtained by 3D synchrotron X-ray computed tomography**
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

**Multi-phase image segmentation with the adaptive deformable mesh**
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

**Process characterization for molding of paper bottles using computed tomography and structure tensor analysis**
Research output: Contribution to journal › Conference article – Annual report year: 2019 › Research › peer-review

**Zonohedral Approximation of Spherical Structuring Element for Volumetric Morphology**
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2019 › Research › peer-review

**A multimodal data-set of a unidirectional glass fibre reinforced polymer composite**
Research output: Contribution to journal › Journal article – Annual report year: 2018 › Research › peer-review

**Computing segmentations directly from x-ray projection data via parametric deformable curves: Paper**
Research output: Contribution to journal › Journal article – Annual report year: 2018 › Research › peer-review

**Deformable Curves for Outlining Objects Directly From Projections**
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 2018 › Research › peer-review

**Investigation of a Monturaqui Impactite by Means of Bi-Modal X-ray and Neutron Tomography**
Research output: Contribution to journal › Journal article – Annual report year: 2018 › Research › peer-review

**Layered Surface Detection for Virtual Unrolling**
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2018 › Research › peer-review

**Linear, Transfinite and Weighted Method for Interpolation from Grid Lines Applied to OCT Images**
Research output: Contribution to journal › Journal article – Annual report year: 2018 › Research › peer-review
Layered Surface Detection in Micro-CT Tetra Pak Data
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 2016 › Research › peer-review

The Traveling Optical Scanner – Case Study on 3D Shape Models of Ancient Brazilian Skulls
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2016 › Research › peer-review

X-ray based micromechanical finite element modeling of composite materials
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2016 › Research › peer-review

Artifact removal in Differential Phase Contrast X-ray Computed Tomography
Research output: Chapter in Book/Report/Conference proceeding › Report chapter – Annual report year: 2016 › Research › peer-review

Dictionary Based Image Segmentation
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2015 › Research › peer-review

Layered Surface Detection in Micro-CT Tetra Pak Data
Research output: Non-textual form › Sound/Visual production (digital) – Annual report year: 2015 › Research

Segmentation and characterization of fibers
Research output: Non-textual form › Sound/Visual production (digital) – Annual report year: 2015 › Research

Surface Detection and Segmentation
Research output: Non-textual form › Sound/Visual production (digital) – Annual report year: 2015 › Research

Two segmentation methods
Research output: Non-textual form › Sound/Visual production (digital) – Annual report year: 2014 › Research

Dictionary Snakes
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

Multiphase Image Segmentation Using the Deformable Simplicial Complex Method
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

Surface Detection using Round Cut
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

3D Shape Modeling Using High Level Descriptors

Deliverable 3.1: Sampling protocols for inorganic ENP from at least 3 matrices (meat, soup, olive oil)
Research output: Book/Report › Report – Annual report year: 2011 › Commissioned

Markov Random Fields on Triangle Meshes
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2010 › Research › peer-review
Surfel Based Geometry Reconstruction
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2010 › Research › peer-review

Height and Tilt Geometric Texture
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2009 › Research › peer-review

Markov Random Fields on 3D Polygonal Meshes
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 2008 › Research

Projects:

Physical model priors for tomogram segmentation
Project: PhD

Segmentation from projections
Project: PhD

Multi-modal microstructure imaging of biological tissue
Project: PhD

New Multi-Modal Registration Methods: Application in Fetal Image Reconstruction
Project: PhD

3D Shape Analysis for Morphometric Evolutionary Modelling- based on 3D X-ray Tomography and Optical Scanning
Project: PhD

Big Data Modelling with Applications to Airports
Project: PhD

3D Optical Coherence Tomography for Retinopathy and Optic Neuropathy
Project: PhD

Segmentation and Reconstruction of Multi-Phase Structures using the Deformable Simplicial Complex Method
Project: PhD

Hybrid Techniques for Interactive Photorealistic Rendering
Project: PhD

3D Shape Modelling using High Level Descriptors
Project: PhD

Activities:

Segmentation and characterization of fibers
Activity: Talks and presentations › Conference presentations
Layered Surface Detection in Micro-CT Tetra Pak Data
Activity: Talks and presentations › Conference presentations

MEK/Compute seminar
Activity: Talks and presentations › Conference presentations

Image reconstruction and analysis workshop
Activity: Talks and presentations › Conference presentations