

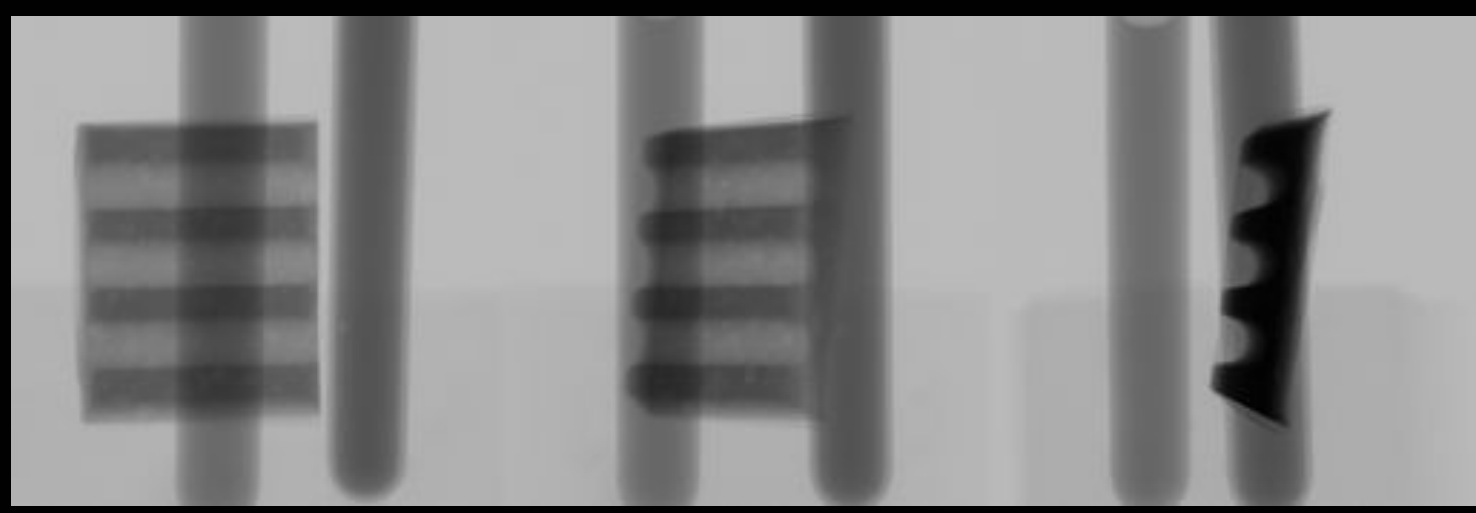
Cph CT Toolbox: On-line CT Reconstruction in Industrial Production Lines

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Load



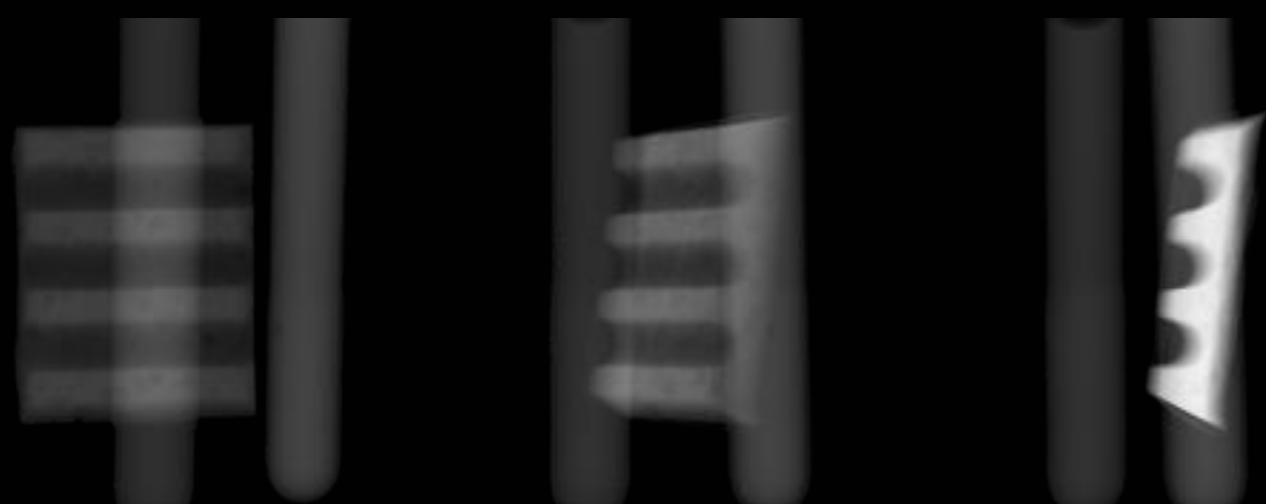
Scene, binary or custom formats



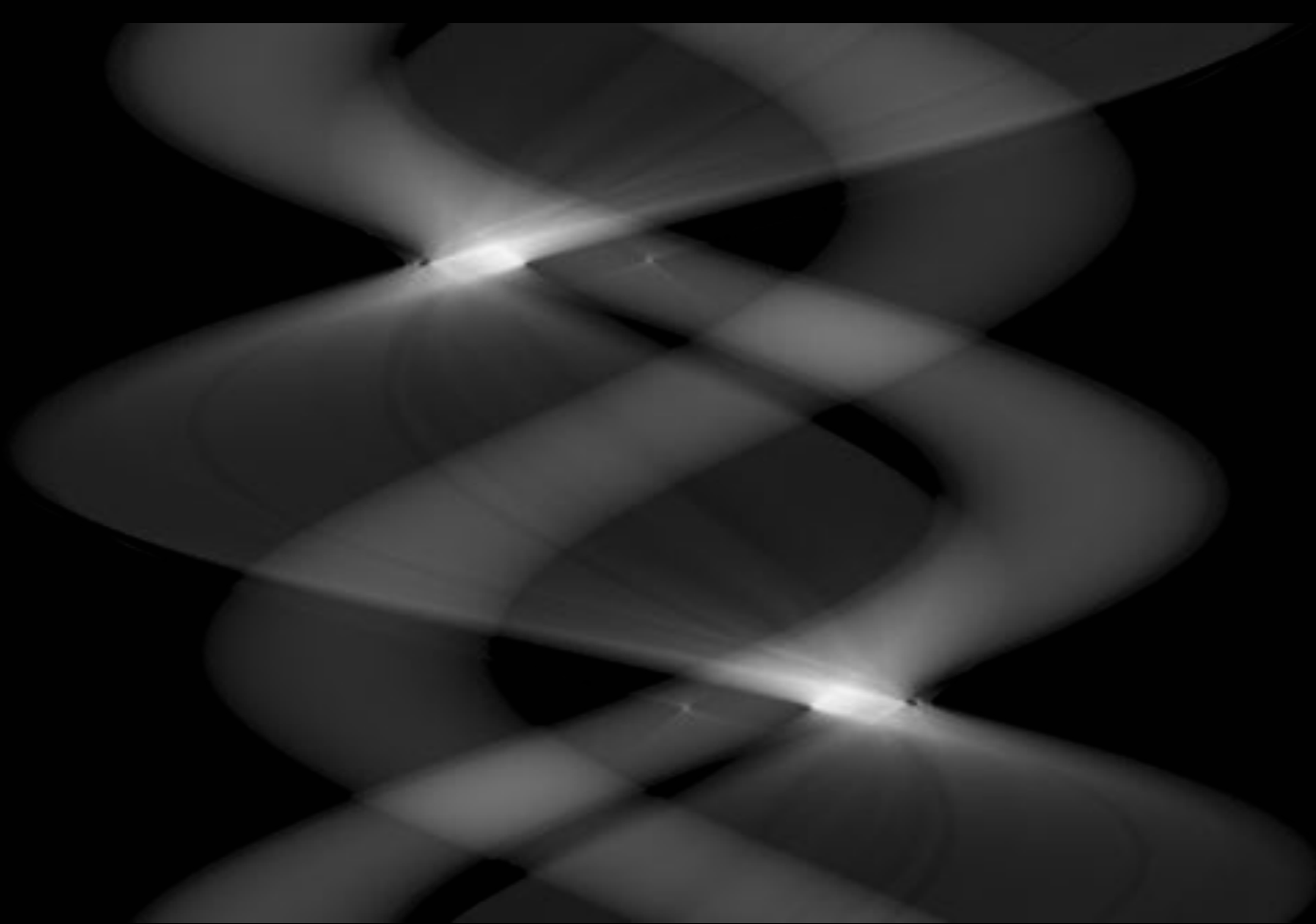
Preprocess



E.g. flat field correction



E.g. sinogram generation



Intro

Cph CT Toolbox is a collection of CT reconstruction implementations providing end-to-end reconstruction of CT scan recordings. It is mainly developed at the University of Copenhagen and it includes Filtered Back Projection algorithms working on flat or curved detectors with a circular or spiral scan motion. It implements a general workflow that suits other existing and future algorithms. We use it ourselves internally on the university and in projects with external academic and industrial partners.

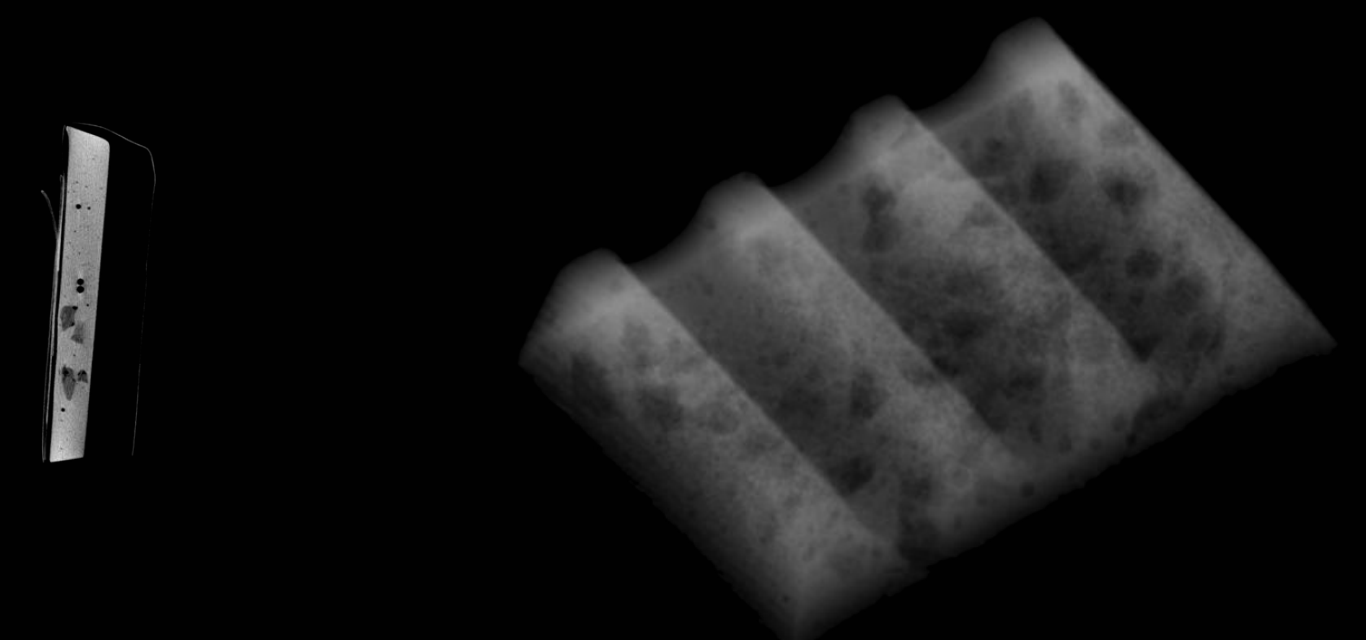
Main features

- Fan or cone beam
- Circular or spiral scan
- Flat or curved detector
- Fully configurable
- Flexible input/output formats
- Built-in or custom filtering
- Extendable with plugins
- Unlimited pre/postprocessing possibilities
- High performance / scalable
- Platform independent
- Open source (GPL)
- Python, NumPy, PyCUDA
- Used in industrial and research environments

Reconstruction



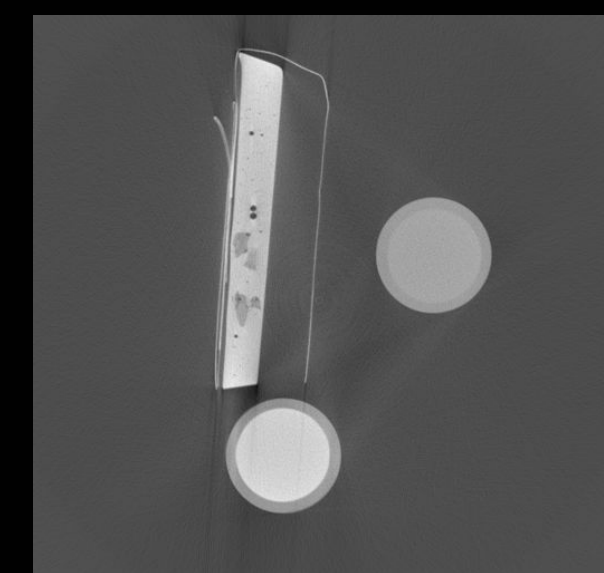
E.g. noise and holder elimination



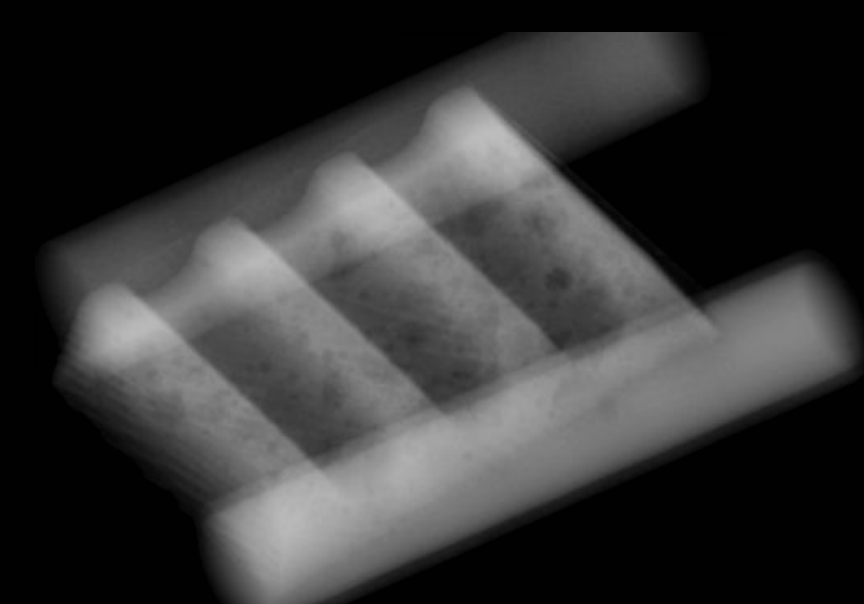
Postprocess



Raw volume: Slice

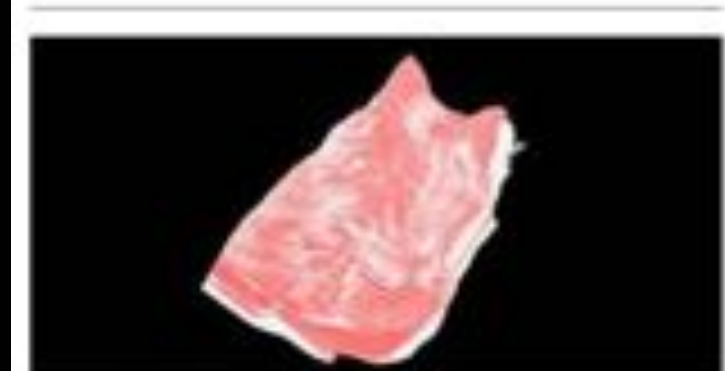


Raw volume: 3D rendered



Online-CT

CT scanner to optimise the yield in food production



The purpose of the CT-scanner is to supply slaughterhouses with detailed knowledge on the amount and distribution of meat, fat and bones in a pig carcass and adjust the cutting accordingly

Further Information and Download

<http://code.google.com/p/cphcttoolbox/>



TreeDFurniture

TREEDFURNITURE: furniture production based on X-ray characterization



The furniture industry is dependent on high quality wood, but this is expensive, and waste due to errors is a major cost. High-tech solution is to reduce waste and ensure optimal use of valuable wood.