5 Axis Printing

Enabling Industries Through Better Toolpaths



Motivation and Relevance

- Large Part Manufacturing is mostly done with expensive and complicated robot systems
- The toolpaths are the biggest influence on part quality

Approach

- Nonplanar Slicing Software can be tested on a small 5 Axis FDM Printer
- Granulat Extruder problems can be solved independently

Research Area

- 5 Axis Printing
- Nonplanar Printing
- Large Format

Picture



Contact



Lukas Hedwig hedwig@fh-Aachen.de goethelab.fh-aachen.de

Results

- 5 Axis slicing allows higher surface quality, unsupported overhangs and applying material to existing parts
- Toolpaths can be transferred to Robots directly

Print Time

Recycling

Properties

