

The project aims to enable data-driven on-line disassembly planning, which is a key factor in achieving an industrial-scale circular economy.

Broad spectrum of thesis opportunities | individual focus possible



Digital twin

Digital shadows/twins/models, Process modeling, Bayesian Networks, Petri nets, ...



Automated planning

Process planning, scheduling, solution space management, design of experiments, ...



Machine Learning

Case-based reasoning, Bayesian networks, Python, ...



Implementation

Worker interfaces, implementation concepts, roadmaps, ...



Data collection

Data models, similarity searching, event logs, process mining, ...



Simulation

Material flow simulation, on-line prediction, data generation, Python, ...



Evaluation

Sustainability evaluation, economic evaluation, cost models, data analytics, ...



Disassembly



Reuse



Remanufacturing



Recycling

How to apply: lasse.streibel@iwb.tum.de | +49 89 289 154 97 | further information on BaSaMa