

FAST

Feedback-guided Automation of Sub-Tasks

All based assistance for experts with reliable decision automation

The Project

Safety-critical visual inspection tasks (e.g., medical diagnosis and quality inspection) often require significant expertise. The need for large amounts of labeled training data and the requirements for a reliable system render Al automation of such tasks are often impractical. FAST provides a solution: Partial automation. FAST filters the data into the part that can be reliably automated by Al almost entirely without errors and the remaining part that the expert needs to process. This novel algorithm is the result from years of research. An initial automation model trained on only a few samples can be deployed early. This system then improves over time by utilizing the experts' feedback during operation. Such an application can assist experts in reliable visual inspection in all fields where expertise and data are scarce.

The Team

Location: Fraunhofer Institute for Cognitive Systems IKS, Munich

Members: <u>Lukas Wehinger (Research)</u>, Jens Gansloser (Research)

AHEAD Infos Batch: 1, 2023 Track: Licensing Phase: 1

The Business Model

Unique Selling Proposition:

A system that immediately reduces the workload of experts

in safety-critical applications without expensive data

preparation

Unfair Advantage: A novel algorithm that allows selecting data for reliable

automation, thereby eliminating almost all prediction errors

Revenue Model: Licensing, Subscription, Service & Consulting

Venture Readiness Level

VRL	Ideati	ion	Inc	ubatior	1	Tract	Growth			
Tarlanda Davida and Lauri										
Technology Readiness Level										
TRL	1	2	3	4	5	6	7	8	9	

The Side Facts

Customer Focus:

Searching For: Partners of PoC evaluation and expert interviews

Industry Tags: Automobile & parts, health care, industrial goods & services

Artificial intelligence, machine learning, human-in-the-loop, **Technology Tags:**

active learning, deep learning, image recognition, safe

intelligence