



Labeling specifications

Daily challenges & industry trends from 5 years with OEMs



UNDERSTAND.AI

A dSPACE
COMPANY

understand.ai

Why

We believe that **AI** is the most powerful tool our generation has at hand. At understand.ai, we make it **accessible** for **real-world** applications.

How

By introducing the **automation engine for data annotation**, we commit to deliver the **right data** at the **right quality** and the **right quantity** to our customers.

What

Our **Zero-Touch Annotation™** technology enables its users to cut costs and accelerate the training and testing of assisted & autonomous driving technology.

We
Automate
Annotations

AI-natives for More Automation

We Move Fast

We know the challenges you're facing in one of the most dynamic markets. We act fast and use the latest deep learning technology to get you ahead of the curve.

The Expert Team

5 years of worldwide AD/ADAS project experience, 60+ Associates with AI, Automotive & Cloud background from renowned institutions below.

A dSPACE Company

To support you better wherever your business is, in July 2019 we've joined the dSPACE family. With united forces and strong global footprint, we earn your trust every single day.

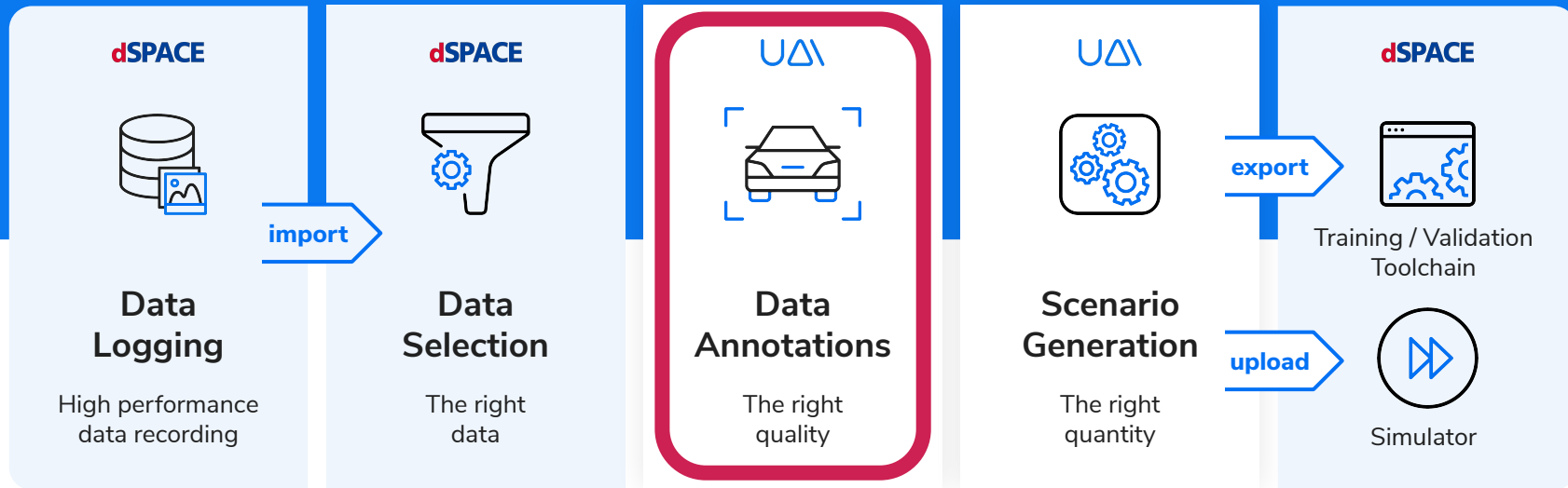


Daily challenges

Working with labeling specifications

Solution Suite for Data Driven Development

Entire suite to generate high quality training and validation data



Customer Storage
Customer Cloud

UAI Product Suite
AWS & Google Cloud
Platform

Customer Applications
Customer Cloud



Truck or Car?

Every day challenges



Use the chat: Enter **1** for **Truck** | Enter **2** for **Car**

Truck or Car?

It depends on your definition



Class: Truck



Class: Car



Class: Pickup

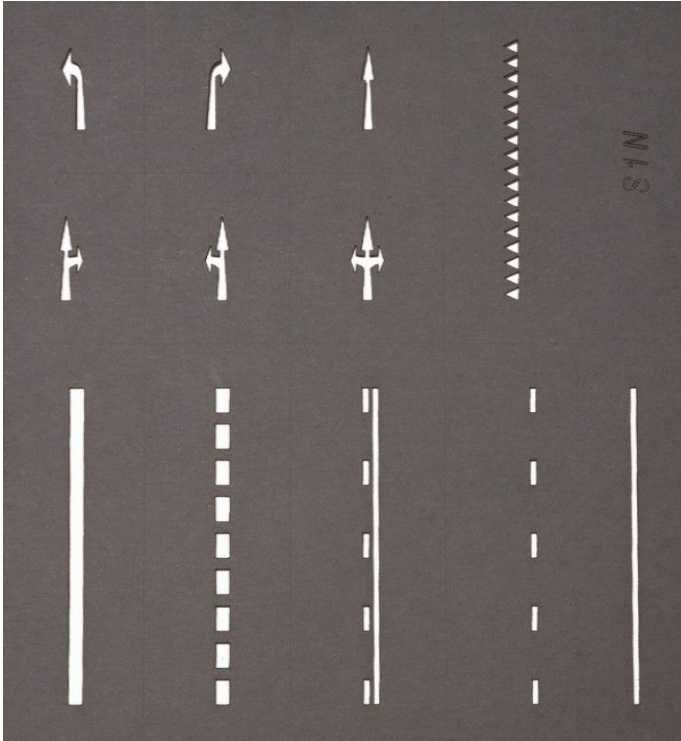
Separate cars or part of the truck?

Every day challenges



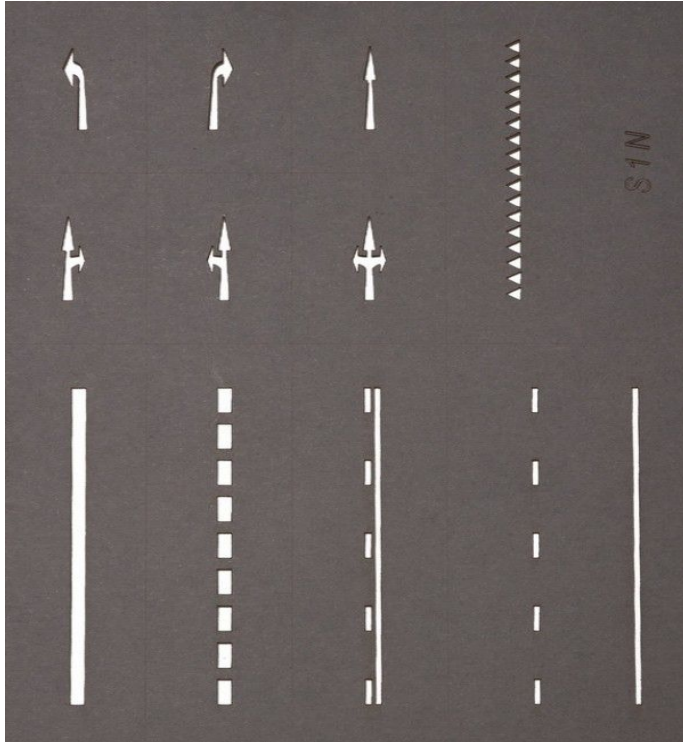
Lane markings - expectation

Every day challenges



Lane markings - reality

Every day challenges



Unique traffic participants

Every day challenges



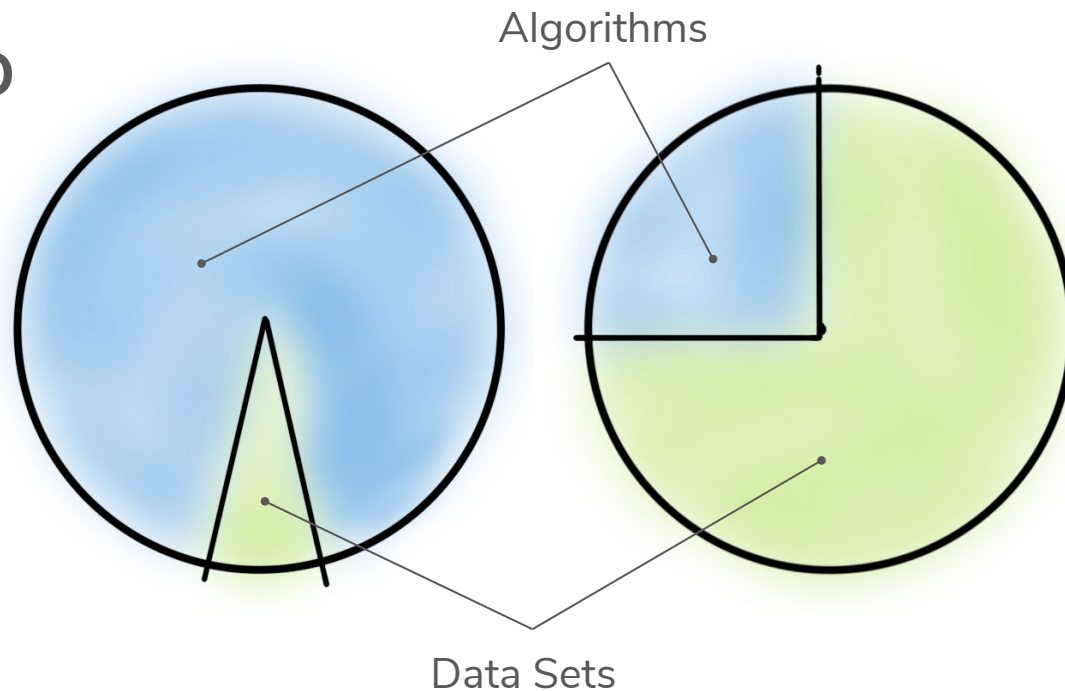
Industry trends

From academia to industry

Shift in work focus

PhD

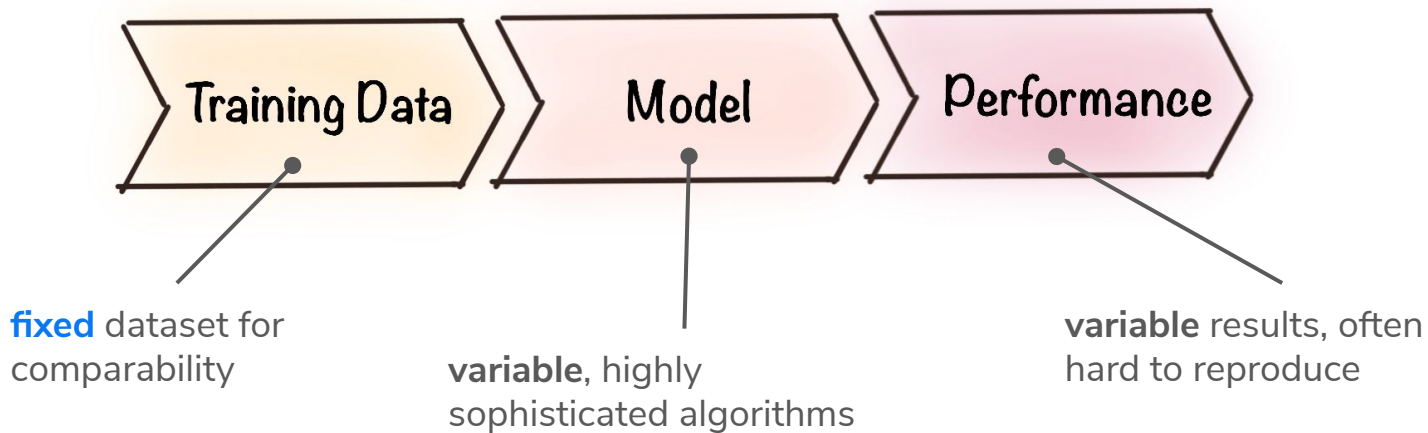
Tesla



Source: Andrej Karpathy | Senior Director of Artificial Intelligence at Tesla

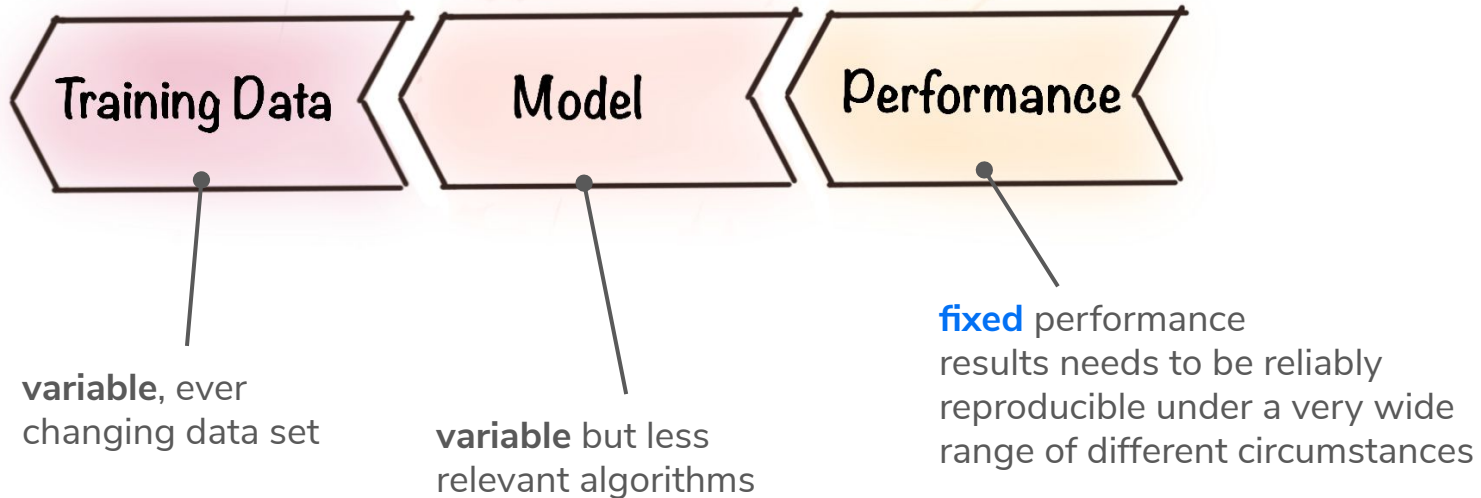
Academia

Academia versus Industry



Industry

Academia versus Industry



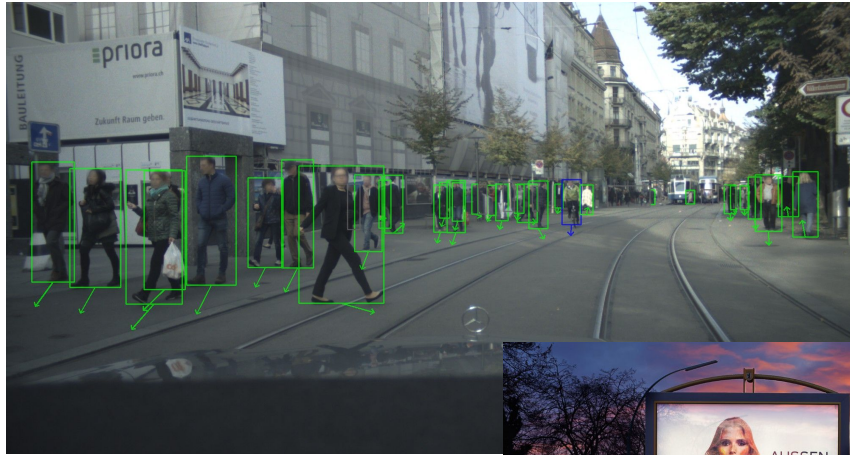
Fixed Model Performance

Industry



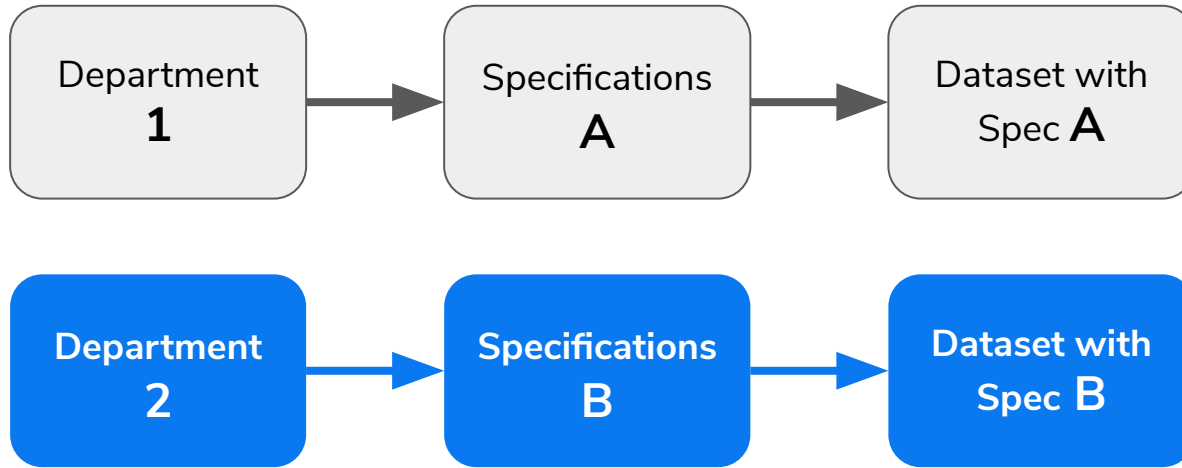
Designing Datasets

Include challenging situations



Annotation projects

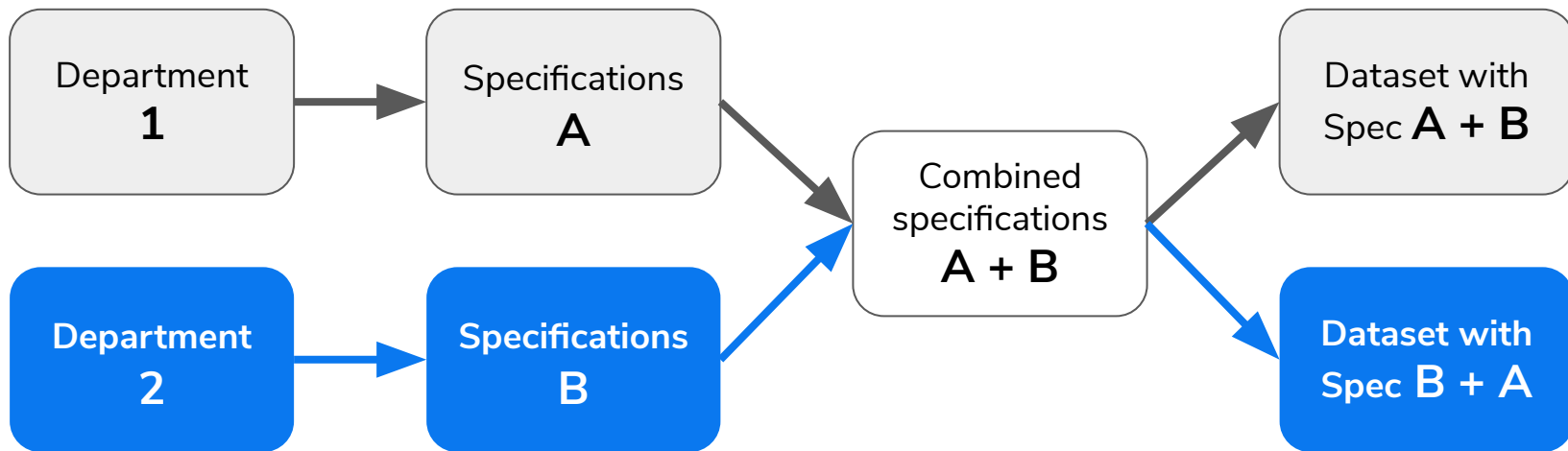
Industry: Past



Outcome: Non-compatible datasets within the same company

Annotation projects

Industry: Present



Outcome: compatible datasets inside a company ??

Annotation projects

Industry: Future

(Some) standardised datasets:

- + Lower entry barrier
- + Best practices integrated
 - High quality
 - High quantity
 - At reasonable cost
- + Extension of existing datasets

Outcome: compatible datasets
between companies & institutions

Q&A



Tim Rädtsch
Technical Project Manager
tim@understand.ai