

Pragmatic Machine Learning

ST6

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ABOUT ME



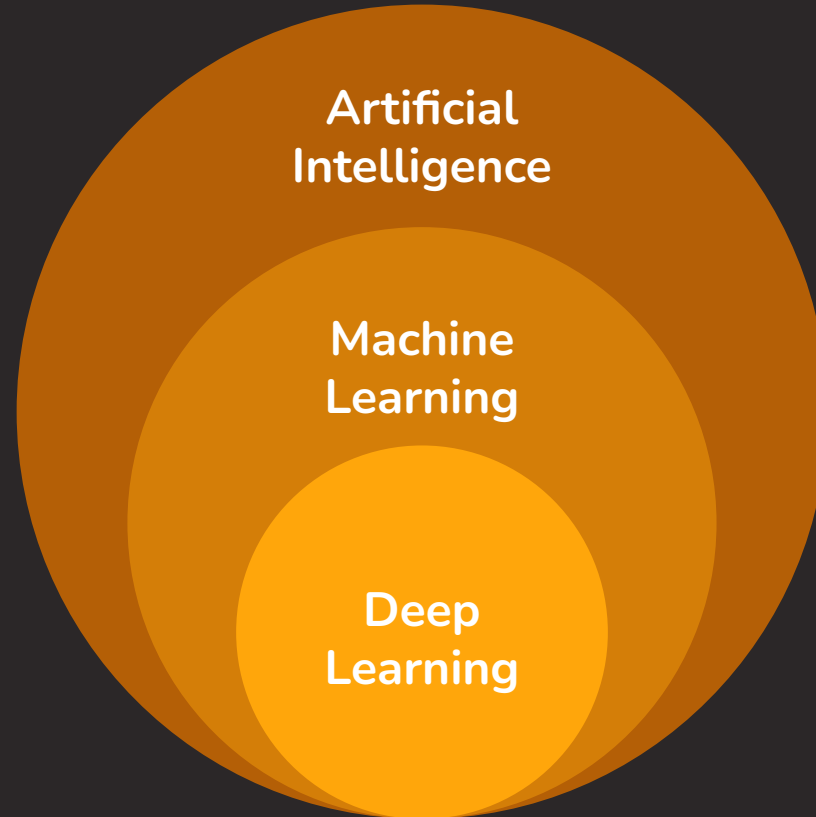
Stefan Dobrev

Co-Founder of ST6

I have been fighting entropy in software for more the last two decades. I believe that nothing is impossible, it just takes a little longer to accomplish.

My mission is to build great teams fueled by a strong culture. My playground is **ST6** - a cultural startup with a focus on software craftsmanship.

LEARNING



DEEP LEARNING DOMAINS

- Computer Vision
- Text (natural language processing)
- Audio (speech recognition)
- Tabular data
- Others - recommendation systems, point cloud, graphs
- *Combining text and images*

COMPUTER VISION TASKS

Classification



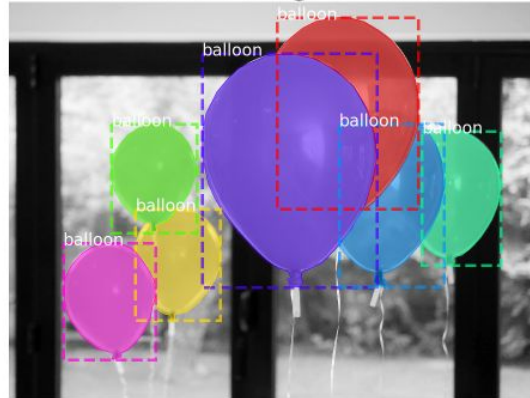
Semantic Segmentation



Object Detection



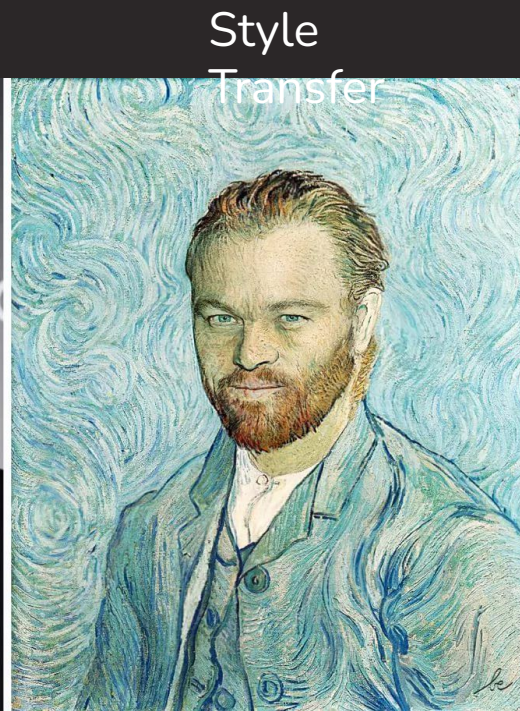
Instance Segmentation



COMPUTER VISION TASKS

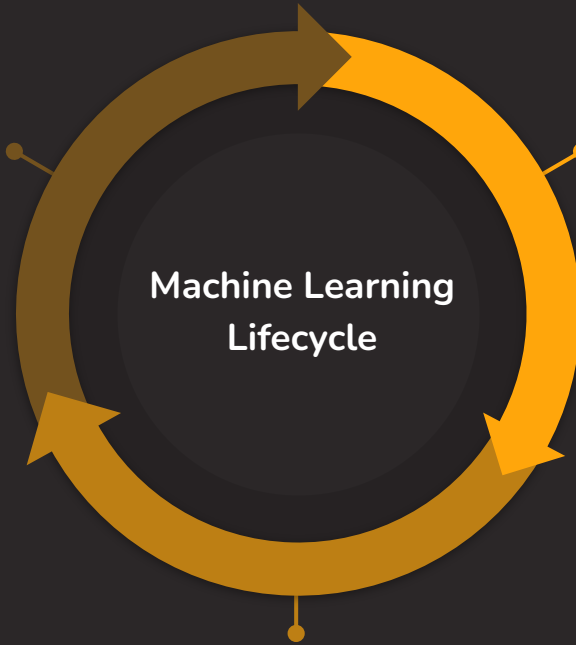


Keypoint Detection



Deployment

- Versioning
- Monitoring



Data

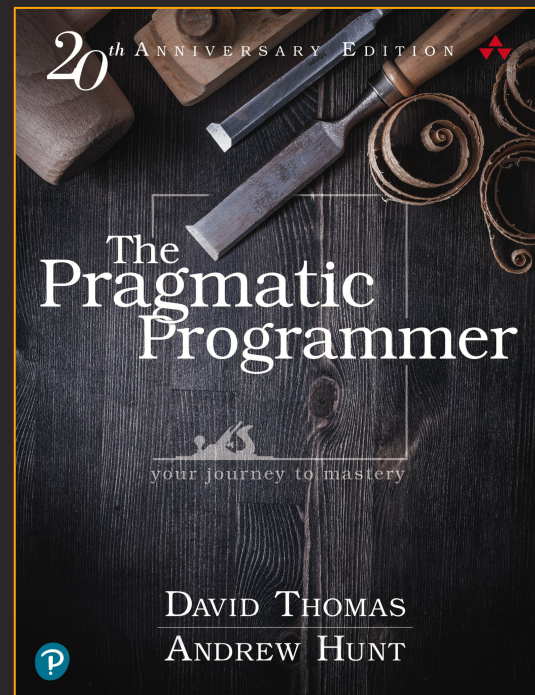
- Gathering
- Cleaning
- Drifting

Model

- Training
- Optimizations


PRAGMATIC MACHINE LEARNING


- Focus on delivering value - end to end
- Tools amplify talent
- Fast feedback loop
- Tip 1: Care about your craft




*Let's get our hands **dirty!***

DATA - FIFTYONE


 FiftyOne trashnet + add stage × ? Have a Team? + ↺ ↻

Sample tags Label tags Labels Other fields Show 

FILTER

 SAMPLES TAGS

No sample tags

 LABEL TAGS

No label tags

METADATA

☐ metadata.size_bytes 2,527

☐ metadata.mime_type 2,527

☐ metadata.width 2,527

☐ metadata.height 2,527

☐ metadata.num_channels 2,527

LABELS

☒ ground_truth 2,527

PRIMITIVES

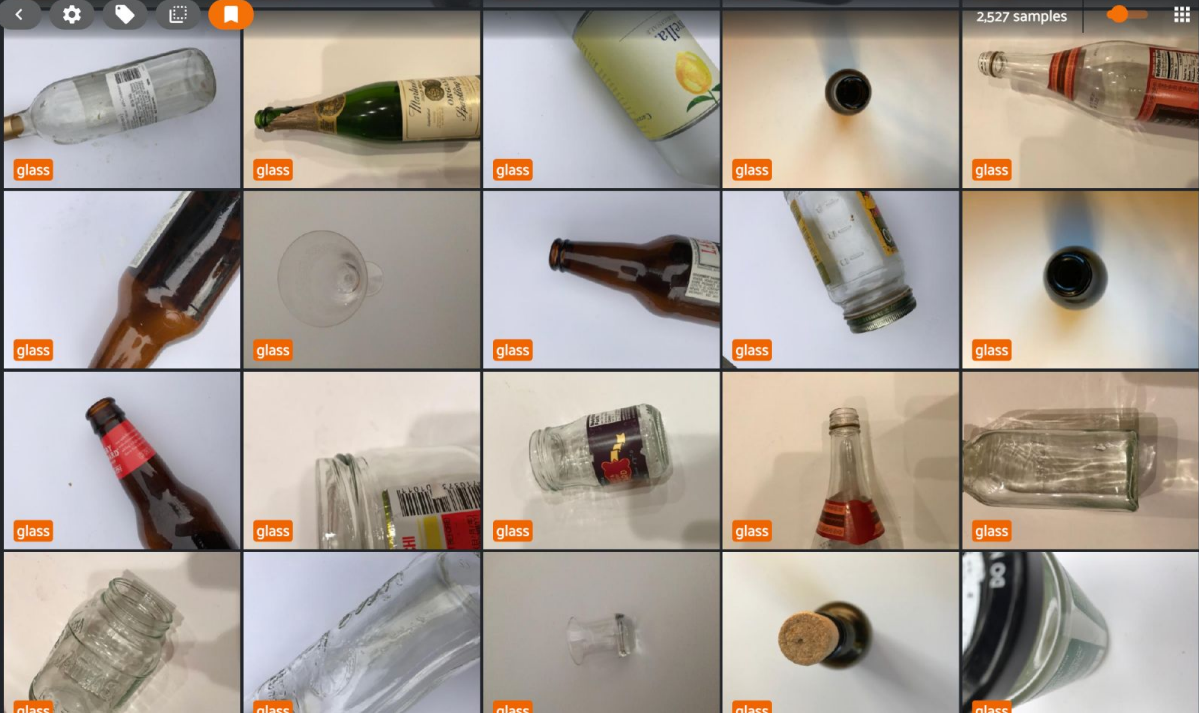
☐ id 2,527

☐ filepath 2,527

☐ uniqueness 2,527

+ ADD GROUP

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2,527 samples 🔍 ⌵

fiftyone.ai

MODEL - PYTORCH LIGHTNING FLASH



DEPLOYMENT - **PLAYTORCH**

- Built on React Native
- Embed into existing apps
- Rapid iterations via PlayTorch app



SOURCE CODE

<https://github.com/ligaz/pragmatic-machine-learning>

<https://snack.expo.dev/@ligaz/openfest-2022>



Thank You!

