# **CrowDPLoS**

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Olivier	Ertz	OEZ	HEIG-VD	WP3	
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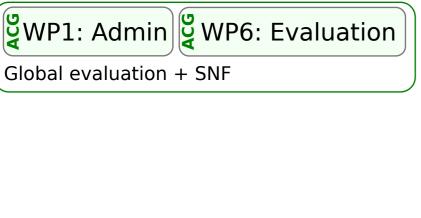
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# Legal issues (privacy)

Judgment of the Federal Supreme Court on Google Street View: Decisions on the processing of personal data

- Right to one's own image (BGE 138 II 346 E. 8)
- Data processing subject to the Federal Act on Data Protection (BGE 138 II 346 E. 3)
- Personal connection for photographs (BGE 138 II 346 E. 6)
- Use of information in the public domain (BGE 138 II 346 E. 8.2)
- Transparency in data processing and making the purpose known
- (BGE 138 II 346 E. 9.1 and E. 11)
- Overriding interests only reluctantly upheld (BGE 138 II 346 E. 10)
- Enclosed spaces, gardens and balconies as private areas (BGE 138 II 346 E. 10.7)
- Complete anonymisation where there is an increased interest in the

total protection of privacy (BGE 138 II 346 E. 10.6.4)



Associations of disabled people Local government

Urban planners

→ could create valuable (g.t.) inputs ! <

Potential partnerships

vector paths →features (re)def

eval

crowds.

Key words:

image segmentation

semantic recognition

object segmentation

instance segmentation

scene recognition scence labelling

object recognition

object detection

**DPLoS** 

Vector data

analyse workers perf Assign difficult tasks to the best workers

Georef

### WP2: DPLoS model

(D)PLoS

indicator

### 5 features:

- curb ramps - slope
- width
- coating
- crosswalks
- attractivity

# WP5: Routing

Pedestrian network graph

- determine vertices and edges
- should be undirected



### ■ WP4: Computer vision CV abilities 📜

DPLoS model

DPLoS features def.

Route /w DPLoS

ground truth

Format should

be comparable

to output of CV

Literature review:

job done in the field? which algos?

Proposal of a methodology Evaluate algos:

which benchmarks?

### Other sensing tech'?

- lidar
- radar
- sonar

# Video based tech?

### Image orientation?

- terrestrial / vehicle:
- from sidewalks? from middle street?
- aerial (UAV): nadir / oblique
- coupled

#### Raster data sources:

- aerial (SI) -> \$
- satellite (30cm!) -> \$
- GSV -> permissions?

#### - Crowdsourced -> :)

#### Vector data sources:

- TLM -> \$

test + crowd

**Î**mages

- Cadastral -> \$
- OSM

# WP3: Crowdsourcing

3 research axis:

crowdsourcing, social sciences and user experience declined in:

- → SotA regarding crowdsourcing tools and plateforms
- → Which are the data to collect and how to simplify their gathering for the workers?
- → What is the level of acceptance for data acquisition: annotation quality, image quality, ...
- → How to reach this level?

from DPLoS def

- 1. Capture & upload positive images "train" (g.t.) → may be georef (GPS chip)
- 2. Acquisition on images < binary  $\otimes$  img digitize features
- 3. Evaluation of CV results