

Instance-Level Recognition Workshop

ICCV 2021

October 11

<https://ilr-workshop.github.io/ICCVW2021>

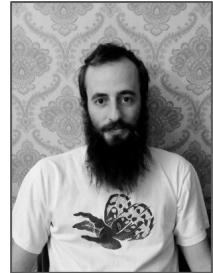
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SEOUL
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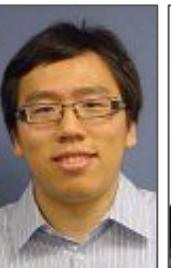
Organizers



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amazon



Workshop split into two sessions

1:00-3:15pm

Session 1 (now!)

3:15-4:00pm

Break

4:00-6:00pm

Session 2

All presentations will be recorded and made available after the workshop.

Times are EDT (UTC-4), October 11

Session 1 Agenda

- 1:00-1:15pm** Opening Remarks (now!)
- 1:15-1:30pm** Landmark Challenges: New Fairer Dataset
- 1:30-2:00pm** Landmark Recognition Challenge:
Overview & Winner Presentations
- 2:00-2:45pm** Invited Talk: Prof. Laura Leal-Taixé
- 2:45-3:15pm** Landmark Retrieval Challenge:
Overview & Winner Presentations

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Session 2 Agenda

4:00-4:30pm Interactive Product Retrieval

4:30-5:00pm Artwork Recognition

5:00-5:45pm Invited Talk: Dr. Rong Jin, Alibaba

5:45-6:00pm Closing Remarks + Q&A

Times are EDT (UTC-4), October 11

What is “instance-level recognition”?



Basic
recognition

Painting

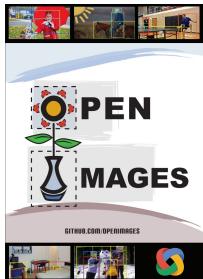


Building



Hat

IM²GENET



What is “instance-level recognition”?



**Basic
recognition**

Painting



Building



Hat

Fine-grained

Post-Impressionist
Painting

Arch

Cap

FGVC7

FGVC workshop

What is “instance-level recognition”?

**Basic
recognition**

Fine-grained

Instance-level



Painting

**Post-Impressionist
Painting**

**Starry Night Over the
Rhone by Vincent
van Gogh**



Building

Arch

**Arc de Triomphe de
l'Étoile, Paris, France**



Hat

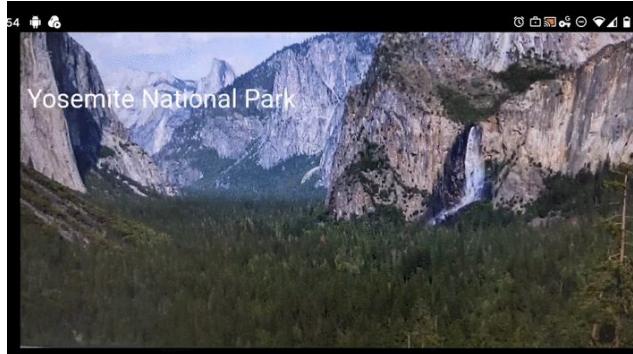
Cap

Google Cap

Many applications



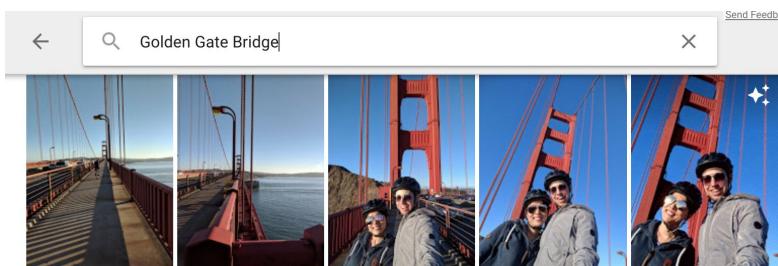
Augmenting cultural exhibits



Travel assistant



Visual commerce

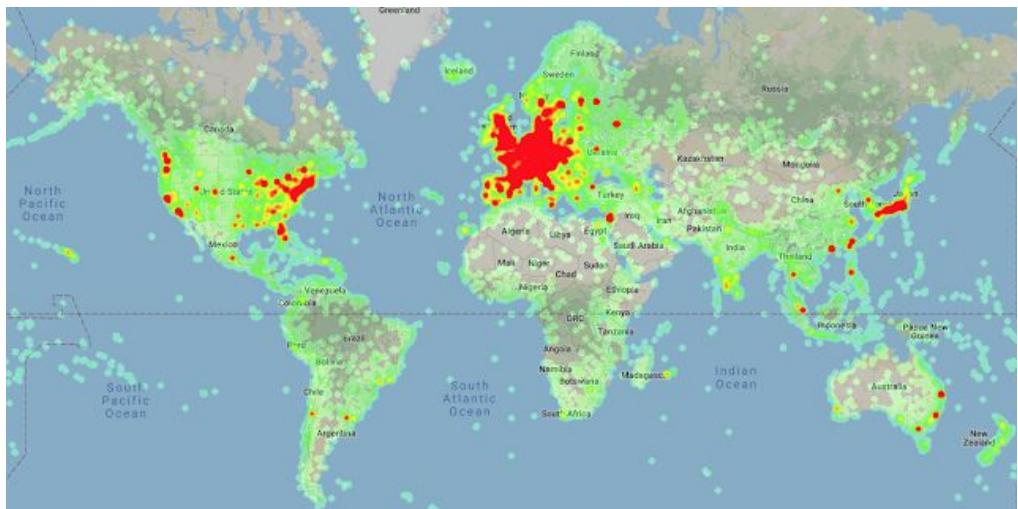


Personal photo search

Problem characteristics

- Large-scale

Google Landmarks Dataset v2:
→ 200 thousand classes



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[[Google Landmarks Dataset v2, Weyand et al, CVPR'20](#)]

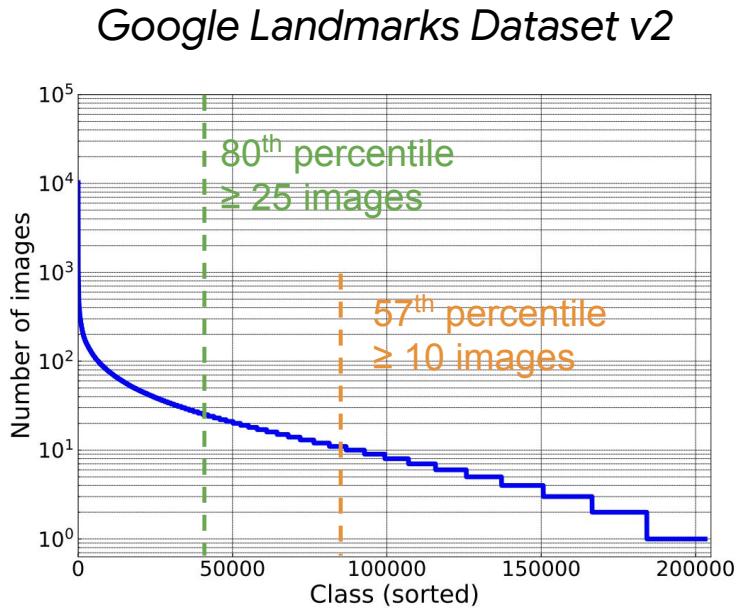
Problem characteristics

- Long-tailed

*Popular
($\geq 1k$ images)*



*Less-known
(≤ 5 images)*

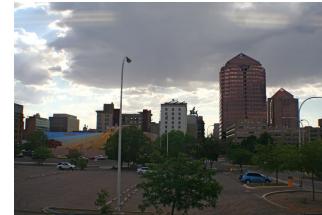


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Problem characteristics

- Limited appearance variability

In many cases: rigid objects, suitable to matching techniques

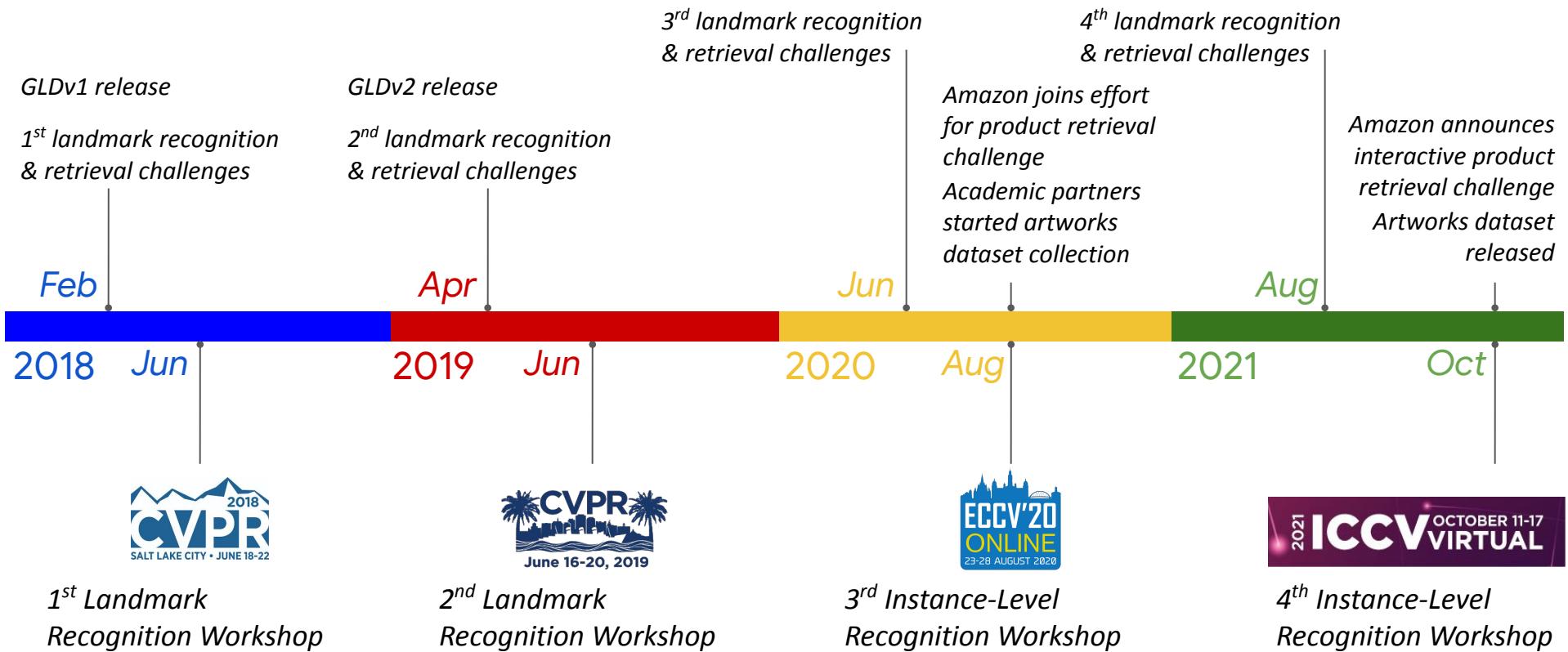


*Example of landmark “[Albuquerque Plaza](#)”
(from Google Landmarks Dataset v2)*

[[Google Landmarks Dataset v2](#), Weyand et al, CVPR'20]

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Timeline: workshop series



We welcome collaborations

Academic and industrial partners are welcome!

- Student/researcher working on this topic: interested to get involved?
- Interested in a different instance-level recognition problem?
- Have a new dataset you'd like to share and use?
- Have other ideas / feedback / suggestions?

Please contact us at:

ilr-workshop@googlegroups.com

Welcome remarks - Q&A