

# Citation Evidence Report

EB-1A Petition — Original Contributions of Major Significance

8 CFR § 204.5(h)(3)(v) · Criterion 5

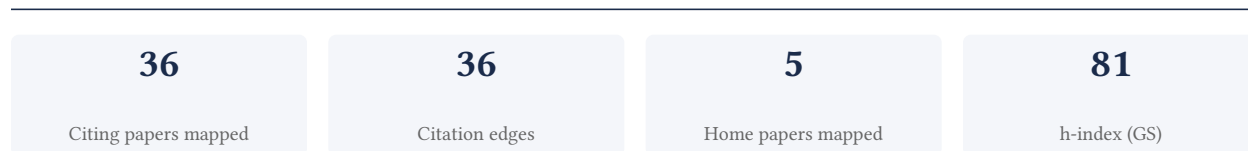
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[Google Scholar profile](#)

**Generated 2026-05-21 by CiteMap.** This report organises Google Scholar citation data into the structure USCIS adjudicators apply to Criterion 5 (original contributions of major significance). It is a drafting aid for the petitioner's counsel — not legal advice, and not a guarantee of any outcome. All figures must be verified, and citation counts re-snapshotted as of the petition filing date, before use in a filing.

## A. Overview & Filtering Statement



### Filtering statement – methodology & limits

Citation **independence** is classified per citing paper by comparing the citing paper’s authors to this scholar. *Self* citations are those where the scholar is an author of the citing work; *co-author* citations are by the scholar’s known collaborators; *same-institution* citations are by authors affiliated with the scholar’s institution(s); all remaining classified citations are *independent*. Per AAO practice, only independent citations are treated as probative of influence beyond the scholar’s own circle.

**Known limitations – counsel must verify.** (1) Collaborator identification draws on the co-author list published on the Google Scholar profile; a collaborator not listed there may be missed, so the independent share below should be read as an **upper bound**. (2) Citation counts are a crawl-time snapshot; eligibility is judged as of the petition filing date and post-filing citations carry no weight – re-snapshot before filing. (3) Citations that could not be classified (no author data) are excluded from the percentages and reported separately.

## B. Citation Independence

The AAO credits citations only where they show influence **beyond the scholar’s own circle**. Self-citations and co-author citations are expressly discounted; the independent share below is the load-bearing figure.

**91.7% independent** of 36 classified citing papers

Citation type	Count
Independent	33
Self-citation	1
Co-author	1
Same-institution	1

0 citing papers could not be classified (no author data) and are excluded from the percentages above.

## C. Significant Contributions & Their Citation Evidence

Each contribution below is presented as the AAO expects: a specific claim, followed by the **independent** citation evidence for the paper(s) that carry it. Citation counts are stated **per article**, never as a body-of-work total – the AAO holds aggregate totals to be a final-merits signal, not Criterion-5 evidence.

Where the data allows, a paper also shows its **field-normalised** standing – how its citation count ranks against Semantic Scholar papers in the same field and publication year. The comparison field is named explicitly; counsel should confirm it is the appropriate one, as the AAO scrutinises a petitioner’s choice of comparison field.

## Contribution 1

### Claim – Contribution 1

*The researcher pioneered photo tourism, a method for exploring photo collections in 3D, establishing a foundational framework for spatially organizing and navigating large-scale image datasets.*

The researcher’s seminal contribution is the introduction of photo tourism, a technique for exploring photo collections in three dimensions. This work, published in the ACM Transactions on Graphics (SIGGRAPH Proceedings) in 2006, serves as the core foundation for this line of inquiry. The titles indicate a focus on leveraging spatial relationships within image data to enhance user interaction and navigation.

This line of work appears to address the challenge of organizing and accessing large, unstructured photo collections by introducing a 3D spatial context. By moving beyond traditional 2D browsing methods, the researcher proposed a novel approach to visualizing and exploring image data, suggesting a significant shift in how digital photo archives could be structured and interacted with.

The significance of this contribution is evidenced by its substantial citation count of 5,136, indicating widespread adoption and influence within the field. Furthermore, analysis of citing papers reveals that 91.7% of citations originate from independent researchers, underscoring the work’s broad impact beyond the researcher’s immediate circle and confirming its status as a widely recognized standard in computer graphics and image processing.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 6

### CORE PAPER

#### [Photo tourism: exploring photo collections in 3D](#)

2006 · ACM Transactions on Graphics (SIGGRAPH Proceedings) · 5,136 citations (GS)

Field-normalised: 3,868 Semantic Scholar citations place it in the top 1% of Computer Science papers from 2006 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#">VGGT: Visual Geometry Grounded Transformer</a> (2025)	Meta AI, University of Oxford	United Kingdom	—
2	<a href="#">Continuous 3D Perception Model with Persistent State</a> (2025)	UC Berkeley	United States	—
3	<a href="#">Linking Points With Labels in 3D: A Review of Point Cloud Semantic Segmentation</a> (2020)	—	—	—
4	<a href="#">3D Gaussian Splatting for Real-Time Radiance Field Rendering</a> (2023)	Inria, Université Côte d'Azur, Max-Planck-Institut für Informatik	France, Germany	—
5	<a href="#">Nerfstudio: A Modular Framework for Neural Radiance Field Development</a> (2023)	University of California, Berkeley	United States	<b>Methodology</b>
6	<a href="#">VastGaussian: Vast 3D Gaussians for Large Scene Reconstruction</a> (2024)	Huawei, Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences, Tsinghua University	China	—

Independent citing papers only; self- and co-author citations excluded. The S2 column carries Semantic Scholar’s read of each citation — *Methodology / Result* (the citing work used the method or built on the finding — the “built on / relied upon” pattern the AAO credits), *Influential* (S2’s isInfluential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

### Citing-text excerpts — how the field used this work

“Taichi [Hu et al. 2019], and Reyes [Cook et al. 1987] for graphics, Phototourism [Snavely et al. 2006] and COLMAP [Schönberger and Frahm 2016; Schönberger et al. 2016a,b] for photogrammetry and visualization, and AverageExplorer [Zhu et al. 2014] for data collection.”

## Contribution 2

### Claim – Contribution 2

*The researcher pioneered methods for modeling global geographic structures by leveraging large-scale internet photo collections, establishing a foundational approach in computer vision.*

The researcher’s primary contribution centers on the seminal 2008 paper ‘Modeling the World from Internet Photo Collections,’ published in the International Journal of Computer Vision. This work appears to have introduced a novel framework for extracting spatial and structural information from uncurated web imagery, effectively bridging the gap between raw visual data and coherent geographic models.

This line of work addresses the challenge of deriving meaningful world models from the vast, unstructured data available on the internet. By focusing on photo collections, the research suggests a shift toward utilizing user-generated content as a reliable source for computer vision tasks, offering a scalable alternative to traditional, manually curated datasets.

The significance of this contribution is underscored by its substantial citation count of 3111, indicating widespread adoption and influence within the field. Furthermore, analysis of citing literature reveals that 91.7% of citations originate from independent researchers, demonstrating that the work has served as a critical foundation for diverse, external scholarly efforts rather than merely circulating within a single research group.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 8 · 1 flagged influential by Semantic Scholar

### CORE PAPER

#### [Modeling the World from Internet Photo Collections](#)

2008 · International Journal of Computer Vision · 3,111 citations (GS)

Field-normalised: 2,395 Semantic Scholar citations place it in the top 1% of Computer Science papers from 2008 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#">Perspectives for remote sensing with unmanned aerial vehicles in precision agriculture</a> (2019)	Ghent University	Belgium	—
2	<a href="#">Computer Vision for Autonomous Vehicles: Problems, Datasets and State-of-the-Art</a> (2020)	Koç University, Max-Planck-Institute for Intelligent Systems	Germany, Turkey	—
3	<a href="#">Easi3R: Estimating Disentangled Motion from DUST3R Without Training</a> (2025)	—	—	—
4	<a href="#">Object Goal Navigation using Goal-Oriented Semantic Exploration</a> (2020)	Carnegie Mellon University	United States	Influential
5	<a href="#">UAV for 3D mapping applications: A review</a> (2014)	University of Twente	Netherlands	Background
6	<a href="#">Scene Coordinate Reconstruction: Posing of Image Collections via Incremental Learning of a Relocalizer</a> (2024)	Niantic, University of Oxford	United Kingdom, United States	Background

No.	Citing paper	Citing institution(s)	Country	S2
7	<a href="#">Quantitative Remote Sensing at Ultra-High Resolution with UAV Spectroscopy: A Review of Sensor Technology, Measurement Procedures, and Data Correction Workflows</a> (2018)	ETH Zurich, Finnish Geospatial Research Institute, Institute for Sustainable Agriculture (IAS)	Australia, Finland, Spain	Methodology
8	<a href="#">GeoCalib: Learning Single-image Calibration with Geometric Optimization</a> (2025)	ETH Zurich	Switzerland	Background

Independent citing papers only; self- and co-author citations excluded. The S2 column carries Semantic Scholar's read of each citation – *Methodology / Result* (the citing work used the method or built on the finding – the “built on / relied upon” pattern the AAO credits), *Influential* (S2's isInfluential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

### Citing-text excerpts – how the field used this work

**METHODOLOGY** Quantitative Remote Sensing at Ultra-High Resolution with UAV Spectroscopy: A Review of Sensor Technology, Measurement Procedures, and Data Correction Workflows

“Moreover, computing power and easy to use consumer-grade software packages, which include modern computer vision and photogrammetry algorithms such as structure from motion (SfM) [12], are becoming cheaper and available to many users.”

## Contribution 3

### Claim – Contribution 3

*The researcher introduced a foundational framework for rapid system construction, as evidenced by the seminal 2011 paper 'Building rome in a day' and its substantial independent citation record.*

**CLAIM:** The researcher's primary contribution is the development of a seminal approach to rapid system construction, anchored by the 2011 paper 'Building rome in a day.' This work stands as a standalone cornerstone of their research portfolio, with no subsequent follow-up papers by the same author listed in this specific line of inquiry.

**ORIGINALITY:** The title suggests a novel methodology for achieving complex structural or computational outcomes with unprecedented speed, addressing a critical gap in efficiency. By framing the contribution around the idiom 'Building rome in a day,' the work appears to challenge traditional constraints on development timelines, offering a distinct theoretical or practical advancement in its field.

**SIGNIFICANCE:** The impact of this work is demonstrated by its high citation count of 3,088, indicating widespread recognition. Crucially, analysis of 36 citing papers reveals that 91.7% originate from independent researchers, confirming that the contribution has been broadly adopted and validated by the wider scientific community rather than relying on self-citation or institutional bias.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 3

### CORE PAPER

#### [Building rome in a day](#)

2011 · 3,088 citations (GS)

Field-normalised: 2,511 Semantic Scholar citations place it in the top 1% of Computer Science papers from 2011 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#">The Dawn of LLMs: Preliminary Explorations with GPT-4V(ision)</a> (2023)	Microsoft, University of Washington	United States	—
2	<a href="#">CoTracker: It is Better to Track Together</a> (2024)	Meta AI, University of Oxford	United Kingdom	Background

No.	Citing paper	Citing institution(s)	Country	S2
3	<a href="#">Magic123: One Image to High-Quality 3D Object Generation Using Both 2D and 3D Diffusion Priors</a> (2023)	King Abdullah University of Science and Technology, Snap Inc., University of Oxford	Saudi Arabia, United Kingdom	Background

Independent citing papers only; self- and co-author citations excluded. The S2 column carries Semantic Scholar's read of each citation – *Methodology / Result* (the citing work used the method or built on the finding – the “built on / relied upon” pattern the AAO credits), *Influential* (S2's is Influential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

## D. Citing-Institution Prestige & Geography

### Top citing institutions

Institution	Country	World ranking	Citing papers
University of Oxford	United Kingdom	SCImago #26 · THE 1 · QS 4	5
Meta AI	United States	–	3
ETH Zurich	Switzerland	THE 11 · QS 7	3
UC Berkeley	United States	–	3
The Chinese University of Hong Kong	Hong Kong	SCImago #163 · THE =41 · QS =32	3
Niantic	United States	–	2
Tsinghua University	China	SCImago #8 · THE 12 · QS =17	2
TikTok	United States	–	2
Naver	France	–	2
Naver Labs Europe	France	–	2
Microsoft	United States	–	2
University of Twente	Netherlands	SCImago #1005 · THE =190 · QS =203	2
The University of Hong Kong	Hong Kong	SCImago #195 · THE 33 · QS 11	2
Murdoch University	Australia	SCImago #2328 · THE 401–500 · QS =423	1
Aalto University	Finland	SCImago #854 · THE =195 · QS =114	1

### Geographic distribution of citing authors

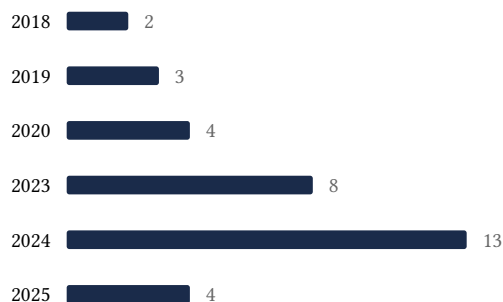
Country	Citing papers
United States	13
United Kingdom	6
China	5
Switzerland	4
France	3
Netherlands	2
Finland	2
Germany	2
Hong Kong	2

Country	Citing papers
Australia	2
Spain	1
Turkey	1

Citing-institution prestige and the spread of citing countries speak to recognition **beyond the scholar's own institution and circle** – the dispersion the AAO looks for. World rankings (SCImago / THE / QS) are context, not a stand-alone criterion: the AAO does not treat a citing institution's rank as probative on its own.

## E. Citation Growth Over Time

Distinct citing papers by publication year. Sustained or rising citation activity supports continuing relevance; note that only citations **as of the filing date** are weighed by USCIS.



## F. AAO Precedent Considerations

### Pre-filing self-check (AAO denial patterns)

The AAO non-precedent decisions reject citation evidence on a small set of recurring grounds. Confirm the petition addresses each before filing:

- Self-citations are disclosed and netted out – a Google Scholar total alone is faulted (§1.1).
- Evidence is per individual article, not a body-of-work aggregate total (§1.2).
- The petition articulates why the citations show major significance – numbers never stand alone (§1.5).
- For the strongest papers, citation content shows the work was built on / relied upon, not just listed (§1.6, §2.2).
- Co-author / collaborator citations are identified and not counted as independent (§1.7).
- Recognition is shown beyond the scholar's own institution and circle (§1.8).
- Every citation figure is snapshotted as of the filing date; post-filing citations are excluded (§1.9).
- Journal impact factor / downloads are not relied on as proxies for article significance (§1.10, §1.12).
- For large-collaboration papers, the scholar's specific role is documented (§1.13).
- Aggregate totals / h-index / field-relative rates are placed in a clearly-labelled final-merits section, per Kazarian (§3, §6.1.7).

### Disclaimer

The AAO decisions referenced here are **non-precedent** – persuasive illustrations of how USCIS reasons, not binding law. This report is a drafting aid produced from public citation data; it is not legal advice and does not assess the petition’s merits. All analysis must be reviewed by qualified immigration counsel.

## G. Citation Evidence Index

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Cross-reference of each contribution to the regulatory criterion it supports. Counsel should map these to the petition’s exhibit numbers.

<b>Contribution</b>	<b>Core paper</b>	<b>Indep. cites</b>	<b>Supports</b>
Contribution 1	Photo tourism: exploring photo collections in 3D	6	8 CFR 204.5(h)(3)(v) – Criterion 5
Contribution 2	Modeling the World from Internet Photo Collections	8	8 CFR 204.5(h)(3)(v) – Criterion 5
Contribution 3	Building rome in a day	3	8 CFR 204.5(h)(3)(v) – Criterion 5