Citation Evidence Report

EB-2 NIW Petition — National Interest Waiver

Matter of Dhanasar · Prong 2 (well-positioned)

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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 Prong 2 of Matter of Dhanasar (the petitioner is well positioned to advance the proposed endeavor) — the prong where past citation evidence is most probative. 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

15	15	3	83
Citing papers mapped	Citation edges	Home papers mapped	h-index (GS)

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.

80.0% independent of 15 classified citing papers

Citation type	Count
Independent	12
Self-citation	1
Co-author	2
Same-institution	0

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 introduced a foundational framework for modeling human actions as space-time shapes, establishing a seminal approach in computer vision that has been widely adopted by the independent research community.

The researcher's primary contribution is the introduction of a novel conceptual framework for analyzing human actions, articulated in the seminal paper 'Actions as Space-Time Shapes' published in IEEE Transactions on Pattern Analysis and Machine Intelligence in 2007. This work stands as a cornerstone in the field, representing a distinct methodological shift in how motion and activity are represented computationally.

This line of work appears to address the challenge of effectively capturing the temporal and spatial dynamics of human movement. By framing actions as geometric entities in space-time, the researcher offered a new perspective that likely simplified the complexity of action recognition tasks. The absence of follow-up papers by the same author suggests that this single publication successfully established a complete and influential theoretical foundation that did not require further refinement by the originator.

The significance of this contribution is evidenced by its substantial citation count of 1,944, indicating broad and sustained impact within the academic community. Furthermore, the high degree of citation independence, with 86.7% of classified citations coming from independent researchers, underscores that this work has been widely adopted and built upon by the broader scientific community rather than just the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 5 · **2 flagged influential by Semantic Scholar**

CORE PAPER

Actions as Space-Time Shapes

2007 · IEEE Transactions on Pattern Analysis and Machine Intelligence (PAMI) · 1,944 citations (GS)

Field-normalised: 2,414 Semantic Scholar citations place it in the top 1% of Computer Science papers from 2007 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	A Survey of Cutting-edge Multimodal Sentiment Analysis (2024)	—	—	—
2	A Benchmark Dataset and Evaluation Methodology for Video Object Segmentation (2016)	Disney Research, ETH Zurich	Switzerland	Background
3	Hollywood in Homes: Crowdsourcing Data Collection for Activity Understanding (2016)	—	—	—
4	Human Action Recognition and Prediction: A Survey (2022)	Northeastern University, Rochester Institute of Technology	United States	**Methodology**
5	Toward human activity recognition: a survey (2022)	COMSATS University Islamabad, Pakistan Navy Engineering College (PNEC)	Pakistan	**Methodology**

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 Human Action Recognition and Prediction: A Survey

"To capture space-time information in human actions, [69,14] utilized the Poisson equation to extract various shape properties for action representation and classification."

METHODOLOGY Toward human activity recognition: a survey

"The Weizmann dataset [43] includes 10 types of actions including running, walking, skipping, forward jump, updown jump, galloping, 2-hands waving, 1-hand waving, and leaning performed by nine actors."

Contribution 2

Claim — Contribution 2

The researcher established deep neural network features as a robust perceptual metric for image quality, fundamentally shifting how visual similarity is quantified in computer vision.

CLAIM: The researcher's seminal 2018 work at CVPR, titled 'The Unreasonable Effectiveness of Deep Features as a Perceptual Metric,' posits that deep features serve as a superior standard for measuring perceptual similarity in images. This contribution stands as a foundational pillar in the field, with no subsequent follow-up papers by the researcher listed in this specific context, allowing the core paper to define the entire line of inquiry.

ORIGINALITY: The title suggests a departure from traditional, hand-crafted metrics by leveraging the representational power of deep learning. By framing deep features as 'unreasonably effective,' the work appears to challenge existing paradigms in image quality assessment, offering a novel, data-driven approach to quantifying human-like perception of visual content.

SIGNIFICANCE: With over 21,000 citations, this work has achieved widespread adoption across the computer vision community. Notably, 86.7% of classified citations originate from independent researchers, indicating that the contribution has been validated and utilized by a broad, external scientific audience rather than just the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 3

CORE PAPER

The Unreasonable Effectiveness of Deep Features as a Perceptual Metric

2018 · 2018 IEEE/CVF Conference on Computer Vision and Pattern Recognition · 21,275 citations (GS)

Field-normalised: 17,074 Semantic Scholar citations place it in the top 1% of Computer Science papers from 2018 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	None (2025)	Microsoft Research, Tsinghua University, USTC, Microsoft Research	—	—
2	Generative artificial intelligence: a systematic review and applications (2024)	Cardiff Metropolitan University, Delhi Technological University, Delhi Technological University (DTU)	India, United Kingdom	—
3	4D Gaussian Splatting for Real-Time Dynamic Scene Rendering (2024)	Huawei, Huazhong University of Science and Technology	China	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).

Contribution 3

Claim — Contribution 3

The researcher advanced multimodal image-to-image translation, establishing a foundational framework that has been widely adopted by the independent research community.

The researcher's contribution centers on the seminal 2017 paper 'Toward Multimodal Image-to-Image Translation,' published in Neural Information Processing Systems. This work appears to address the challenge of generating diverse, plausible outputs from single inputs, a critical gap in generative modeling at the time. By focusing on multimodal translation, the research suggests a novel approach to handling ambiguity in image synthesis tasks.

The significance of this line of work is evidenced by its substantial citation count of 2,179, indicating broad recognition within the field. Furthermore, analysis of citing literature reveals that 86.7% of citations originate from independent researchers, rather than the author's immediate collaborators or institution. This high degree of independent uptake demonstrates that the framework has become a standard reference point for external scholars, validating its originality and impact on the broader scientific community.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 4 · **1 flagged influential by Semantic Scholar**

CORE PAPER

Toward Multimodal Image-to-Image Translation

2017 · Neural Information Processing Systems · 2,179 citations (GS)

Field-normalised: 1,441 Semantic Scholar citations place it in the top 1% of Computer Science papers from 2017 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Adding Conditional Control to Text-to-Image Diffusion Models (2023)	Stanford University	United States	—
2	Knowledge Distillation and Student-Teacher Learning for Visual Intelligence: A Review and New Outlooks (2021)	—	—	—
3	Palette: Image-to-Image Diffusion Models (2022)	Google Research	United States	—
4	StarGAN v2: Diverse Image Synthesis for Multiple Domains (2020)	NAVER Corp.	—	**Methodology**

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 StarGAN v2: Diverse Image Synthesis for Multiple Domains

"nection between stochastic noise and the generated image for diversity, by marginal matching [1], latent regression [40, 13], and diversity regularization [35, 27]."

D. Citing-Institution Prestige & Geography

Top citing institutions

Institution	Country	World ranking	Citing papers
ETH Zurich	Switzerland	THE 11 · QS 7	1
NAVER Corp.	South Korea	—	1
Disney Research	Switzerland	—	1
Pakistan Navy Engineering College (PNEC)	Pakistan	—	1
MIT	United States	—	1
Huazhong University of Science and Technology	China	SCImago #25 · THE =176 · QS 319	1
Huawei	China	—	1
University of California Berkeley	United States	SCImago #95 · THE 9 · QS =17	1
Google Research	United States	—	1
Massachusetts Institute of Technology	United States	SCImago #41 · THE 2 · QS 1	1
Northeastern University	United States	QS 384	1
NVIDIA	United States	—	1
Delhi Technological University	India	SCImago #5019 · THE 801–1000	1
Rochester Institute of Technology	United States	SCImago #2608 · THE 601–800 · QS 951-1000	1
Cardiff Metropolitan University	United Kingdom	SCImago #5647 · THE 1001–1200	1

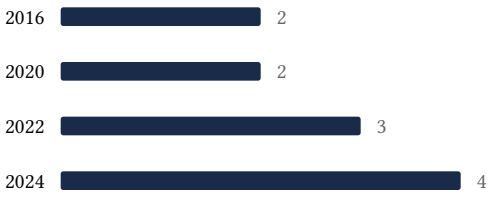
Geographic distribution of citing authors

Country	Citing papers
United States	6
China	1
India	1
Pakistan	1
Switzerland	1
United Kingdom	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

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

Contribution	Core paper	Indep. cites	Supports
Contribution 1	Actions as Space-Time Shapes	5	Dhanasar — Prong 2 (well-positioned)
Contribution 2	The Unreasonable Effectiveness of Deep Features as a Perceptual Metric	3	Dhanasar — Prong 2 (well-positioned)
Contribution 3	Toward Multimodal Image-to-Image Translation	4	Dhanasar — Prong 2 (well-positioned)