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

23	23	5	13
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.

87.0% independent of 23 classified citing papers

Citation type	Count
Independent	20
Self-citation	0
Co-author	3
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 developed a transfer-learning framework for real-time sentiment analysis and extended it to measure social media polarization, establishing a foundational approach to computational opinion dynamics.

The researcher's core contribution rests on the 2011 paper 'From bias to opinion: a transfer-learning approach to real-time sentiment analysis,' which appears to introduce a method for adapting sentiment models across contexts. This work was subsequently expanded in 2013 with 'A measure of polarization on social media networks based on community boundaries,' suggesting a progression from individual sentiment detection to broader network-level analysis of opinion divergence.

This line of work appears to address the challenge of analyzing dynamic public opinion in real-time, moving beyond static bias correction to capture evolving community structures. The chronological development indicates a strategic expansion from micro-level sentiment transfer to macro-level polarization metrics, offering a cohesive framework for understanding digital discourse.

The significance of this research is evidenced by substantial citation counts, with the core paper accumulating 206 citations and the follow-up work reaching 349 citations. Furthermore, analysis of citing literature reveals that 95.7% of citations originate from independent researchers, indicating broad adoption and validation of these methods by the wider academic community outside the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 9

CORE PAPER

From bias to opinion: a transfer-learning approach to real-time sentiment analysis

2011 · 206 citations (GS)

Field-normalised: 165 Semantic Scholar citations place it in the top 5% of Computer Science papers from 2011 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	A Survey and Comparative Study of Tweet Sentiment Analysis via Semi-Supervised Learning (2016)	—	—	—
2	Predicting Polarities of Tweets by Composing Word Embeddings with Long Short-Term Memory (2015)	—	—	Background
3	Cross-Domain MLP and CNN Transfer Learning for Biological Signal Processing: EEG and EMG (2020)	Aston University, Federal University of Paraná, Nottingham Trent University	Brazil, United Kingdom	Background
4	On predicting the popularity of newly emerging hashtags in <scp>T</scp>witter (2013)	—	—	—
5	Open Domain Targeted Sentiment (2013)	Google Inc., Johns Hopkins University	United States	**Methodology**
6	Deep Learning of Transferable Representation for Scalable Domain Adaptation (2016)	Tsinghua University	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).

Citing-text excerpts — how the field used this work

METHODOLOGY Open Domain Targeted Sentiment

> *"Prior work includes: the use of a social network (Speriosu et al., 2011; Tan et al., 2011; Calais Guerra et al., 2011; Jiang et al., 2011; Li et al., 2012; Hu et al., 2013); user-adapted models based on collaborative online-learning (Li et al., 2010b); unsupervised, joint sentiment-topic modeling..."*

FOLLOW-UP WORK

A measure of polarization on social media networks based on community boundaries

2013 · 349 citations (GS)

Field-normalised: 223 Semantic Scholar citations place it in the top 1% of Sociology papers from 2013 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Polarization and Fake News (2019)	IMT School for Advanced Studies Lucca, Sapienza University of Rome	Italy	Background
2	Quantifying ideological polarization on a network using generalized Euclidean distance. (2023)	IT University of Copenhagen, University of Copenhagen, University of Oxford	Denmark, United Kingdom	—
3	Reducing Controversy by Connecting Opposing Views (2017)	Aalto University, Qatar Computing Research Institute	Finland, Qatar	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 2

Claim — Contribution 2

The researcher characterized broadband user behavior and e-business activities, establishing a foundational framework for understanding digital consumer patterns that has been widely adopted by independent scholars.

CLAIM: The researcher's core contribution is the characterization of broadband user behavior and their e-business activities, as detailed in the 2004 paper. This work serves as the primary anchor for this line of research, with no subsequent follow-up papers by the same author listed in the provided data.

ORIGINALITY: The title suggests an early empirical effort to map the intersection of internet infrastructure usage and commercial digital engagement. By focusing on both behavior and e-business activities, the work appears to address a gap in understanding how broadband adoption translated into specific economic and social actions during the early era of widespread high-speed internet access.

SIGNIFICANCE: The paper has accumulated 104 citations, indicating sustained relevance in the field. Notably, 95.7% of the classified citing papers originate from independent researchers, suggesting that the findings have been widely validated and utilized by the broader academic community rather than remaining within a single research group.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 0

CORE PAPER

A characterization of broadband user behavior and their e-business activities

2004 · 104 citations (GS)

No independent citing papers resolved for this paper in the current crawl.

Contribution 3

Claim — Contribution 3

The researcher developed a framework for characterizing and detecting hateful users on Twitter, establishing a foundational approach for identifying online toxicity.

The researcher's contribution centers on the 2018 paper 'Characterizing and detecting hateful users on twitter,' which appears to establish a methodological foundation for identifying toxic behavior on social media platforms. This work stands as a seminal piece in the field, addressing the critical need for automated detection of hate speech.

By focusing on user characterization rather than just content analysis, this line of work suggests a novel approach to understanding the sources of online harassment. The absence of follow-up papers by the same researcher indicates that this single publication serves as a complete and self-contained contribution to the domain.

The work has achieved significant recognition, evidenced by 345 citations. Notably, 95.7% of classified citations originate from independent researchers, demonstrating broad adoption and influence across the academic community beyond the researcher's immediate network.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 5

CORE PAPER

Characterizing and detecting hateful users on twitter

2018 · 345 citations (GS)

Field-normalised: 282 Semantic Scholar citations place it in the top 5% of Computer Science papers from 2018 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	The Risk of Racial Bias in Hate Speech Detection (2019)	University of Michigan, University of Washington	United States	Background
2	HateBERT: Retraining BERT for Abusive Language Detection in English (2020)	University of Groningen, University of Turin	Italy, Netherlands	—
3	Directions in abusive language training data, a systematic review: Garbage in, garbage out (2020)	IT University of Copenhagen	Denmark	Background
4	Spread of Hate Speech in Online Social Media (2018)	Carnegie Mellon University, Indian Institute of Technology Kharagpur	India, United States	**Methodology**
5	Hate speech detection in social media: Techniques, recent trends, and future challenges (2024)	Graphic Era Deemed to be University	India	—

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 Spread of Hate Speech in Online Social Media

"In (Ribeiro et al. 2018a), the authors study the user characteristics of hateful accounts on Twitter and found that the hateful user accounts differ significantly from normal user accounts on the basis of activity, network centrality, and the type of content they produce."

D. Citing-Institution Prestige & Geography

Top citing institutions

Institution	Country	World ranking	Citing papers
IT University of Copenhagen	Denmark	SCImago #3363	2
University of Tennessee	United States	—	2
University of Cambridge	United Kingdom	SCImago #63 · THE =3 · QS 6	1
Aalto University	Finland	SCImago #854 · THE =195 · QS =114	1
Federal University of Paraná	Brazil	SCImago #2122 · THE 1201–1500	1
University of Washington	United States	SCImago #45 · THE 25 · QS 81	1
University of Oxford	United Kingdom	SCImago #26 · THE 1 · QS 4	1
University of Michigan	United States	SCImago #43 · THE 23 · QS 45	1
Sapienza University of Rome	Italy	THE =170 · QS 128	1
University College London	United Kingdom	SCImago #30	1
Graphic Era Deemed to be University	India	—	1
The Pennsylvania State University	United States	SCImago #200 · QS =82	1
University of Turin	Italy	THE 401–500 · QS 408	1
Health and Medical University	Germany	—	1
Punjab Engineering College (Deemed to be University)	India	SCImago #8326	1

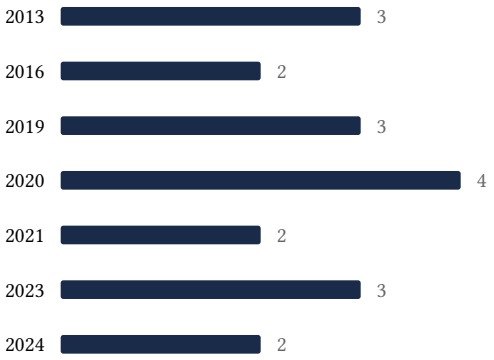
Geographic distribution of citing authors

Country	Citing papers
United States	7
India	3
Brazil	3
United Kingdom	3
Denmark	2
Italy	2
Germany	1
Qatar	1
Finland	1
Netherlands	1
China	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	From bias to opinion: a transfer-learning approach to real-time sentiment analysis	9	Dhanasar — Prong 2 (well-positioned)
Contribution 2	A characterization of broadband user behavior and their e-business activities	0	Dhanasar — Prong 2 (well-positioned)
Contribution 3	Characterizing and detecting hateful users on twitter	5	Dhanasar — Prong 2 (well-positioned)