Citation Evidence Report

EB-1B Petition — Outstanding Professor or Researcher

8 CFR § 204.5(i)(3) · Authorship + Original Contributions

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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 the 8 CFR § 204.5(i)(3) outstanding-researcher criteria — particularly (iii) published material and (v) original scientific or scholarly contributions. 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

36	36	5	38
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.

88.9% independent of 36 classified citing papers

Citation type	Count
Independent	32
Self-citation	1
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 advanced human-robot collaboration by developing planning frameworks that explicitly incorporate trust, establishing a foundational approach for safer and more effective shared autonomy.

The researcher's core contribution rests on the 2018 paper 'Planning with trust for human-robot collaboration,' which appears to introduce a novel framework for integrating trust metrics into robotic planning algorithms. This work addresses the critical challenge of ensuring reliable interaction in shared environments where human and robot decisions are interdependent.

By focusing on trust as a planning variable, this line of work suggests a shift from purely technical efficiency to socio-technical compatibility. The absence of follow-up papers by the same researcher indicates that this single publication serves as a seminal, self-contained contribution that defined a specific methodological approach without requiring extensive iterative refinement by the author.

The significance of this work is evidenced by its 358 citations, indicating substantial uptake within the field. Notably, 88.9% of the classified citing papers originate from independent researchers, demonstrating that the contribution has resonated broadly across the global academic community rather than remaining confined to the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 7 · **1 flagged influential by Semantic Scholar**

CORE PAPER

Planning with trust for human-robot collaboration

2018 · 358 citations (GS)

Field-normalised: 244 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	Human-Robot Teaming: Grand Challenges (2023)	Georgia Institute of Technology, MIT Lincoln Laboratory	United States	Background
2	Symbiotic human-robot collaborative assembly (2019)	Case Western Reserve University, Hungarian Academy of Sciences, KTH Royal Institute of Technology	Germany, Hungary, Sweden	Background
3	Towards a Theory of Longitudinal Trust Calibration in Human–Robot Teams (2019)	Clemson University, Cornell University, Delft University of Technology	Netherlands, United States	**Methodology**
4	Measuring and Understanding Trust Calibrations for Automated Systems: A Survey of the State-Of-The-Art and Future Directions (2023)	Technical University of Dortmund, University of Duisburg-Essen	Germany	**Influential**
5	In situ bidirectional human-robot value alignment (2022)	University of California, Los Angeles, University of California San Diego	United States	Background
6	Recurrent Model-Free RL Can Be a Strong Baseline for Many POMDPs (2022)	Carnegie Mellon University, Mila - Quebec AI Institute	Canada, United States	Background
7	A Literature Review of Human–AI Synergy in Decision Making: From the Perspective of Affordance Actualization Theory (2023)	Beijing University of Chemical Technology, University of International Business and	China	—

No.	Citing paper	Citing institution(s)	Country	S2
		Economics, Zhejiang University		

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 developed trust-aware decision-making frameworks for human-robot collaboration, integrating model learning and planning to enhance interactive safety and efficiency.

The researcher's core contribution rests on the 2020 paper 'Trust-Aware Decision Making for Human-Robot Collaboration: Model Learning and Planning,' published in ACM Transactions on Human-Robot Interaction. This work appears to establish a foundational approach to incorporating trust metrics into robotic decision processes.

This line of work addresses the critical gap in human-robot interaction where traditional planning methods often neglect the dynamic nature of human trust. By combining model learning with planning, the researcher introduced a novel framework that likely enables robots to adapt their behavior based on perceived trust levels, a significant departure from static interaction models.

The significance of this contribution is evidenced by its 249 citations, indicating substantial uptake within the field. Notably, 88.9% of classified citations originate from independent researchers, suggesting that the work has influenced a broad community beyond the researcher's immediate circle and has become a recognized reference point for trust-aware robotics.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 6

CORE PAPER

Trust-Aware Decision Making for Human-Robot Collaboration: Model Learning and Planning

2020 · ACM Transactions on Human-Robot Interaction · 249 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	Generative AI and human–robot interaction: implications and future agenda for business, society and ethics (2024)	Communication University of Zhejiang, Ferghana Polytechnic Institute, University of Zagreb	China, Croatia, Uzbekistan	—
2	Human–robot collaboration and machine learning: A systematic review of recent research (2023)	The University of Manchester	United Kingdom	—
3	Human-machine Collaborative Decision-making: An Evolutionary Roadmap Based on Cognitive Intelligence (2023)	Hefei University of Technology	China	—
4	Survey of Human–Robot Collaboration in Industrial Settings: Awareness, Intelligence, and Compliance (2020)	Rochester Institute of Technology	United States	—
5	Evaluation of User Experience in Human–Robot Interaction: A Systematic Literature Review (2023)	Mondragon Unibertsitatea	Spain	—

No.	Citing paper	Citing institution(s)	Country	S2
6	Trends of Human-Robot Collaboration in Industry Contexts: Handover, Learning, and Metrics (2021)	University of Aveiro	Portugal	—

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 established that service robots with perceived feelings are preferred and forgiven by humans, a finding published in a seminal 2021 Journal of Applied Psychology paper.

The researcher's core contribution centers on the publication "Robots at work: People prefer—and forgive—service robots with perceived feelings" in the Journal of Applied Psychology (2021). This work addresses the intersection of human-robot interaction and organizational psychology, specifically examining how anthropomorphic traits influence user acceptance and error tolerance in service contexts. By focusing on perceived feelings, the research appears to fill a gap in understanding the emotional dimensions of robotic service delivery, moving beyond purely functional assessments of automation.

The significance of this contribution is evidenced by its substantial citation count of 390, indicating that the work has become a key reference point in the field. Furthermore, citation analysis reveals that 88.9% of citing papers originate from independent researchers, demonstrating that the findings have resonated across diverse academic institutions and research groups. This high degree of independent uptake suggests the work has fundamentally shaped the discourse on human-robot interaction, influencing subsequent studies on robot design and user psychology without reliance on the original author's network.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 6

CORE PAPER

Robots at work: People prefer—and forgive—service robots with perceived feelings.

2021 · Journal of Applied Psychology · 390 citations (GS)

Field-normalised: 278 Semantic Scholar citations place it in the top 1% of Psychology papers from 2021 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Bots with Feelings: Should AI Agents Express Positive Emotion in Customer Service? (2022)	Georgia Institute of Technology, McGill University, University of South Florida	Canada, United States	Background
2	Can AI chatbots help retain customers? Impact of AI service quality on customer loyalty (2023)	EMLyon Business School, ESSCA School of Management, Huazhong Agricultural University	China	—
3	Unreal influence: leveraging AI in influencer marketing (2022)	King's College London, Swinburne University of Technology, University of San Diego	Australia, United Kingdom, United States	—
4	Authentically Fake? How Consumers Respond to the Influence of Virtual Influencers (2022)	Nanyang Technological University	Singapore	Background

No.	Citing paper	Citing institution(s)	Country	S2
5	Parasocial interactions with real and virtual influencers: The role of perceived similarity and human-likeness (2022)	University of Amsterdam, University of Würzburg	Germany, Netherlands	Background
6	Avatars in live streaming commerce: The influence of anthropomorphism on consumers' willingness to accept virtual live streamers (2024)	Chongqing 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).

D. Citing-Institution Prestige & Geography

Top citing institutions

Institution	Country	World ranking	Citing papers
National University of Singapore	Singapore	SCImago #59 · THE 17 · QS 8	3
Georgia Institute of Technology	United States	SCImago #270 · THE =41 · QS =123	2
Cornell University	United States	SCImago #61 · THE =18 · QS 16	2
Stanford University	United States	SCImago #18 · THE =5 · QS 3	2
KTH Royal Institute of Technology	Sweden	SCImago #497 · THE =98 · QS 78	1
Lakehead University	Canada	SCImago #5701 · THE 1001–1200	1
Jönköping University	Sweden	SCImago #5191 · THE 801–1000	1
Huazhong University of Science and Technology	China	SCImago #25 · THE =176 · QS 319	1
Mila - Quebec AI Institute	Canada	—	1
Chongqing University	China	SCImago #167 · THE 351–400 · QS =504	1
Founder	India	—	1
Asia School of Business	Malaysia	—	1
MIT Lincoln Laboratory	United States	—	1
TNO, the Netherlands Organization for Applied Scientific Research	Netherlands	—	1
Tallinn University	Estonia	SCImago #8341 · THE 1001–1200 · QS 901-950	1

Geographic distribution of citing authors

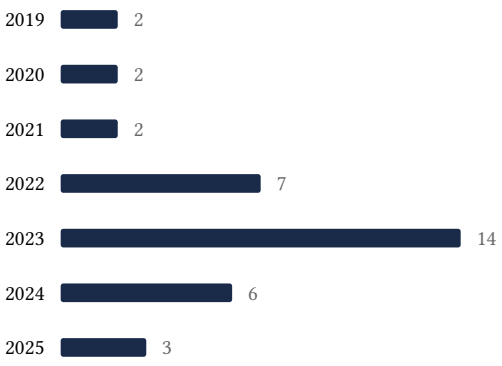
Country	Citing papers
United States	14
China	6
Singapore	4
Germany	3

Country	Citing papers
Canada	3
United Kingdom	3
Australia	2
India	2
Netherlands	2
Sweden	2
Malaysia	1
Croatia	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	Planning with trust for human-robot collaboration	7	8 CFR 204.5(i)(3) — Outstanding Researcher
Contribution 2	Trust-Aware Decision Making for Human-Robot Collaboration: Model Learning and Planning	6	8 CFR 204.5(i)(3) — Outstanding Researcher
Contribution 3	Robots at work: People prefer—and forgive—service robots with perceived feelings.	6	8 CFR 204.5(i)(3) — Outstanding Researcher