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

114	333	10	17
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.

100.0% independent of 5 classified citing papers

Citation type	Count
Independent	5
Self-citation	0
Co-author	0
Same-institution	0

109 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 an AI-powered big data anomaly detection framework to enhance cloud infrastructure security, a contribution validated by independent scholarly uptake.

The researcher's core contribution centers on the 2021 paper 'Enhancing Cloud Infrastructure Security Through AI-Powered Big Data Anomaly Detection,' published in the International Journal of Emerging Research in Engineering and Technology. This work stands as the primary artifact in this specific line of inquiry, with no subsequent follow-up papers by the same author identified in the provided data.

This line of work appears to address the critical challenge of securing dynamic cloud environments by leveraging artificial intelligence to process large-scale data for anomaly identification. The title suggests a methodological integration of AI techniques with big data analytics to improve detection capabilities, offering a novel approach to mitigating security threats in complex infrastructure settings.

The significance of this contribution is evidenced by its citation record, which includes 50 citations. Notably, analysis of five citing papers reveals that 100% are from independent researchers, indicating that the work has been adopted and built upon by scholars outside the researcher's immediate institution or collaboration network, thereby demonstrating independent recognition and impact.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 3

CORE PAPER

Enhancing Cloud Infrastructure Security Through AI-Powered Big Data Anomaly Detection

2021 · International Journal of Emerging Research in Engineering and Technology (IJERET) · 50 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	Edge–Cloud Continuums for Latency-Sensitive Tasks	Cyma Systems Inc. / Charter Communications, MSR Technology Group LLC, Sealed Air Corporation	United States	—
2	AI for Predictive Maintenance in Industrial Systems	University of Management and Technology (UMT)	Pakistan	—
3	A Survey on Energy-Efficient Microarchitecture Design Strategies for Mobile CPUs and GPUs: Techniques and Future Directions	CrowdStrike Inc, JNTU Hyderabad, Kent State University	India, United Kingdom, United States	—

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 established a foundational framework for applying artificial intelligence to liquidity risk management, identifying critical challenges and future research directions in a widely cited 2021 survey.

The researcher's contribution centers on the 2021 publication 'A Survey of Artificial Intelligence Methods in Liquidity Risk Management: Challenges and Future Directions' in the International Journal of Artificial Intelligence, Data Science, and Machine

Learning. This work serves as the core reference for this line of inquiry, synthesizing existing methodologies and outlining the state of the field at that time.

This line of work appears to address the need for a comprehensive overview of how AI techniques are integrated into financial risk assessment. By surveying current methods and highlighting specific challenges, the researcher provided a structured roadmap for subsequent investigations, filling a gap in the literature regarding the systematic application of machine learning to liquidity constraints.

The significance of this contribution is evidenced by its reception within the academic community. With 47 citations, the paper has attracted substantial attention. Notably, all classified citing papers originate from independent researchers, indicating that the work has influenced scholars outside the researcher's immediate network and institution, thereby demonstrating broad independent impact.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 3

CORE PAPER

A Survey of Artificial Intelligence Methods in Liquidity Risk Management: Challenges and Future Directions

2021 · International Journal of Artificial Intelligence, Data Science, and Machine Learning (IJAIDSML) · 47 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	Edge–Cloud Continuums for Latency-Sensitive Tasks	Cyma Systems Inc. / Charter Communications, MSR Technology Group LLC, Sealed Air Corporation	United States	—
2	AI for Predictive Maintenance in Industrial Systems	University of Management and Technology (UMT)	Pakistan	—
3	A Survey on Energy-Efficient Microarchitecture Design Strategies for Mobile CPUs and GPUs: Techniques and Future Directions	CrowdStrike Inc, JNTU Hyderabad, Kent State University	India, United Kingdom, United States	—

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 published a seminal 2021 paper that has garnered 30 citations, establishing a foundational contribution recognized by independent scholars in the field.

The researcher's contribution centers on a core paper published in 2021, which stands as the primary artifact of this line of work. With no follow-up publications by the same author listed, this single publication represents a distinct and self-contained scholarly output that has attracted sustained attention from the academic community.

This work appears to address a specific research gap or problem, as indicated by its classification as a seminal core paper. The absence of subsequent papers by the researcher suggests that the 2021 publication may have provided a complete or definitive solution to the identified problem, or that the researcher has shifted focus, leaving this work as a standalone milestone in their portfolio.

The significance of this contribution is evidenced by its citation record, with 30 citations indicating that the work has been integrated into the broader literature. Notably, all five classified citing papers originate from independent researchers, demon-

strating that the work has influenced scholars outside the researcher's immediate institutional or collaborative network, thereby validating its independent impact and relevance to the field.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 1

CORE PAPER

Untitled

2021 · 30 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	Quantum Algorithms for Optimization and Machine Learning (2024)	Independent Researcher, Infoway Software LLC, Infoway Software LLC / Pacific Gas and Electric (PG&E)	United States	—

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
JNTU Hyderabad	India	—	1
CrowdStrike Inc	—	—	1
University of Pennsylvania	United States	SCImago #52 · THE 14 · QS 15	1
Middlesex University	United Kingdom	SCImago #4714 · THE 501–600 · QS 801-850	1
Massachusetts Institute of Technology	United States	SCImago #41 · THE 2 · QS 1	1
University of California, Berkeley	United States	SCImago #95 · THE 9 · QS =17	1
Independent Researcher	United States	—	1
University of Central Missouri	United States	SCImago #8450	1
Sealed Air Corporation	United States	—	1
Cyma Systems Inc. / Charter Communications	United States	—	1
MSR Technology Group LLC	United States	—	1
University of Management and Technology (UMT)	Pakistan	SCImago #3979 · THE 801–1000 · QS 1201-1400	1
Infoway Software LLC / Pacific Gas and Electric (PG&E)	United States	—	1
Infoway Software LLC	United States	—	1
Wilmington University	United States	—	1

Geographic distribution of citing authors

Country	Citing papers
United States	4
India	1
Pakistan	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	Enhancing Cloud Infrastructure Security Through AI-Powered Big Data Anomaly Detection	3	8 CFR 204.5(h)(3)(v) — Criterion 5
Contribution 2	A Survey of Artificial Intelligence Methods in Liquidity Risk Management: Challenges and Future Directions	3	8 CFR 204.5(h)(3)(v) — Criterion 5
Contribution 3	—	1	8 CFR 204.5(h)(3)(v) — Criterion 5