

# Citation Evidence Report

EB-1A Petition — Original Contributions of Major Significance

8 CFR § 204.5(h)(3)(v) · Criterion 5

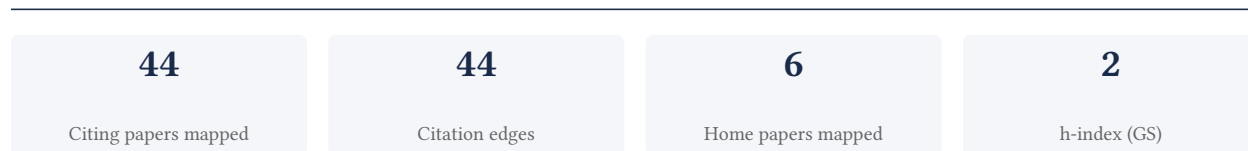
## Ishaani M

Amazon Web Services

[Google Scholar profile](#)

**Generated 2026-05-30 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.

**92.7% independent** of 41 classified citing papers

Citation type	Count
Independent	38
Self-citation	0
Co-author	3
Same-institution	0

3 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 established a framework for evaluating human-AI partnerships in LLM-based code migration, a contribution validated by high independent citation rates.*

The researcher's core contribution centers on the 2024 paper 'Evaluating human-AI partnership for LLM-based code migration.' This work appears to address the emerging need for structured assessment methods as large language models are increasingly applied to software engineering tasks, specifically code migration. By focusing on the partnership aspect, the research suggests a novel approach to measuring the efficacy and dynamics of human-AI collaboration in this domain.

The significance of this line of work is evidenced by its rapid uptake in the academic community. With 42 citations, the paper has garnered substantial attention. Notably, 92.7% of these citations originate from independent researchers, indicating that the contribution has resonated beyond the author's immediate circle and is being utilized by the broader field to advance understanding of AI-assisted software development.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 37

#### CORE PAPER

### [Evaluating human-AI partnership for LLM-based code migration](#)

2024 · 42 citations (GS)

Field-normalised: 23 Semantic Scholar citations place it in the top 10% of Computer Science papers from 2024 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#">Plan-then-execute: An empirical study of user trust and team performance when using llm agents as a daily assistant</a>	Delft University of Technology, The University of Queensland	Australia, Netherlands	—
2	<a href="#">A Survey of Bugs in AI-Generated Code</a>	Massey University, Polytechnique Montréal	Canada, New Zealand	—
3	<a href="#">Human-AI experience in integrated development environments: a systematic literature review</a>	Delft University of Technology	Netherlands	—
4	<a href="#">Language models for code optimization: Survey, challenges and future directions</a>	TurinTech AI, University of Leeds, University of Surrey	United Kingdom	—
5	<a href="#">How co2stly is chi? The carbon footprint of generative ai in hci research and what we should do about it</a>	University of Copenhagen	Denmark	—
6	<a href="#">Codemenv: Benchmarking large language models on code migration</a>	King Abdullah University of Science and Technology, Peking University, South China University of Technology	China, Saudi Arabia	—
7	<a href="#">Migrating code at scale with llms at google</a>	Google	United States	—
8	<a href="#">The changing nature of human-AI relations: A scoping review on terminology and evolvment in the scientific literature</a>	—	—	—
9	<a href="#">How is Google using AI for internal code migrations?</a>	Google, Google (Singapore)	Singapore	—

No.	Citing paper	Citing institution(s)	Country	S2
10	<a href="#">Comparing human and LLM generated code: The jury is still out!</a>	Monash University, Monash University New Zealand, University of Otago	Australia, New Zealand	—
11	<a href="#">Automatically fixing dependency breaking changes</a>	University College London	United Kingdom	—
12	<a href="#">Mental model shifts in human-LLM interactions</a>	—	—	—
13	<a href="#">Who Does What? Archetypes of Roles Assigned to LLMs During Human-AI Decision-Making</a>	Ruhr University of Duisburg-Essen	Germany	—
14	<a href="#">Exploring trust, acceptance, and behavioral differences when humans collaborate with large language models as tools and teammates</a>	Clemson University, Florida State University	United States	—
15	<a href="#">Paradigm shift on Coding Productivity Using GenAI</a>	—	—	—
16	<a href="#">Decoding GPT's hidden "rationality" of cooperation</a>	Leibniz Institute for Financial Research SAFE	Germany	—
17	<a href="#">Intelligent network optimization in cloud environments with generative AI and LLMs</a>	Oracle (United States)	United States	—
18	<a href="#">Large language models for software testing: A research roadmap</a>	Gran Sasso Science Institute, ISTI-CNR, Istituto di Analisi dei Sistemi ed Informatica Antonio Ruberti	Italy, Spain	—
19	<a href="#">Exploring human-llm conversations: Mental models and the originator of toxicity</a>	University of Liechtenstein	Liechtenstein	—
20	<a href="#">Will You Trust Me More Than ChatGPT? Evaluating LLM-Generated Code Feedback for Mock Technical Interviews</a>	Virginia Tech	United States	—
21	<a href="#">CoUpJava: A Dataset of Code Upgrade Histories in Open-Source Java Repositories</a>	University of Waterloo	Canada	—
22	<a href="#">Large language model tools as catalysts for collective cognition in collaborative new-product development: a quasi-experimental study</a>	Zhejiang University	China	—
23	<a href="#">Environment-in-the-Loop: Rethinking Code Migration with LLM-based Agents</a>	Nanjing University, University College London	China, United Kingdom	—
24	<a href="#">Usage, Effects and Requirements for AI Coding Assistants in the Enterprise: An Empirical Study</a>	IBM Research	United States	—
25	<a href="#">LLM-Assisted Repository-Level Generation with Structured Spec-Driven Engineering</a>	McGill University, University of Ottawa	Canada	—
26	<a href="#">A Systematic Literature Survey on Agentic AI Frameworks for Legacy Software Modernization</a>	National Institute of Technology Tiruchirappalli	India	—
27	<a href="#">Can GPT mimic human preferences? An empirical and structural investigation</a>	Goethe University Frankfurt, Leibniz Institute for Financial Research SAFE	Germany	—
28	<a href="#">Quality Evaluation of Generative AI Systems: Processes, Metrics, Methods, and Frameworks for Industrial Software Engineering</a>	—	—	—
29	<a href="#">A Generative AI Framework for Semi-Automated Oracle SQL to BigQuery SQL Code</a>	Deutsche Telekom (Germany), Persistent Systems (India)	Germany, India	—

No.	Citing paper	Citing institution(s)	Country	S2
	<a href="#">Migration using LLM Driven DAGs and Iterative Refinement</a>			
30	<a href="#">Towards Effective Human-AI Collaboration</a>	Yuan Ze University	Taiwan	—

Showing the 30 most-cited of 37 independent citing papers.

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
Google	United States	—	3
University College London	United Kingdom	SCImago #30	2
Amazon Web Services	United States	—	2
Delft University of Technology	Netherlands	SCImago #359 · THE 57 · QS =47	2
Leibniz Institute for Financial Research SAFE	Germany	—	2
Berlin School of Economics and Law	Germany	—	2
University of Ottawa	Canada	SCImago #610 · THE =187 · QS =219	1
McGill University	Canada	SCImago #168 · THE =41 · QS 27	1
ISTI-CNR	Italy	—	1
Ruhr University of Duisburg-Essen	Germany	—	1
National Institute of Technology Tiruchirappalli	India	SCImago #6060 · THE 801–1000 · QS 731-740	1
University of Leeds	United Kingdom	SCImago #377 · THE 118 · QS 86	1
University of Liechtenstein	Liechtenstein	—	1
The University of Queensland	Australia	SCImago #126 · THE =80 · QS =42	1
Deutsche Telekom (Germany)	Germany	—	1

### Geographic distribution of citing authors

Country	Citing papers
United States	8
Germany	6
Canada	3
China	3
United Kingdom	3
Netherlands	2
India	2
Australia	2

Country	Citing papers
New Zealand	2
Finland	1
Denmark	1
Poland	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.

## F. AAO Precedent Considerations

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### 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.

Contribution	Core paper	Indep. cites	Supports
Contribution 1	Evaluating human-AI partnership for LLM-based code migration	37	8 CFR 204.5(h)(3)(v) – Criterion 5