U.S. Citizenship and Immigration Services

Non-Precedent Decision of the Administrative Appeals Office

In Re: 37890337

Date: MAY 6, 2025

Appeal of Service Center Operations (SCOPS) Decision

Form I-140, Immigrant Petition for Alien Workers (Extraordinary Ability)

The Petitioner, a machine learning engineer, requests classification under the employment-based, first-preference (EB-1) immigrant visa category as an alien with "extraordinary ability." *See* Immigration and Nationality Act (the Act) section 203(b)(1)(A), 8 U.S.C. § 1153(b)(1)(A). Successful petitioners for U.S. permanent residence in this category must demonstrate "sustained national or international acclaim" and extensively document recognition of their achievements in their fields. Section 203(b)(1)(A)(i) of the Act.

Service Center Operations (SCOPS) denied the petition, concluding that the Petitioner met two of the requested category's ten evidentiary requirements – one less than needed for a final merits determination. On appeal, he contends that he satisfied the following additional criteria:

- Original contributions of major significance in his field; and
- Commandment of a high salary or significantly high remuneration relative to others in the field.

See 8 C.F.R. § 204.5(h)(3)(v), (ix).

The Petitioner bears the burden of demonstrating eligibility for the requested benefit by a preponderance of the evidence. *Matter of Chawathe*, 25 I&N Dec. 369, 375-76 (AAO 2010). Exercising de novo appellate review, *see Matter of Christo's, Inc.*, 26 I&N Dec. 537, 537 n.2 (AAO 2015), we conclude that he has met the requisite minimum number of evidentiary requirements by submitting evidence of original contributions of major significance to his field. We will therefore withdraw SCOPS' decision and remand the matter for a final merits determination and entry of a new decision consistent with the following analysis.

I. LAW

To qualify for this immigrant visa category, a petitioner must demonstrate that they:

- Have "extraordinary ability in the sciences, arts, education, business, or athletics;"
- Seek to continue work in their field of expertise in the United States; and

- Would substantially benefit the country as an immigrant.

Section 203(b)(1)(A)(i)-(iii) of the Act.

The term "extraordinary ability" means expertise commensurate with "one of that small percentage who have risen to the very top of the field of endeavor." 8 C.F.R. § 204.5(h)(2). Unless a petitioner received "a major, international recognized award," they must satisfy at least three of ten lesser evidentiary criteria. 8 C.F.R. § 204.5(h)(3).[1]

If a petitioner meets either evidentiary standard and the requirements at section 203(b)(1)(A)(ii), (iii) of the Act, U.S. Citizenship and Immigration Services (USCIS) must then make a final merits determination. To merit approval, the record – as a whole – must establish a petitioner's "sustained national or international acclaim" and recognized achievements placing them among the small percentage at their field's very top. *See Kazarian v. USCIS*, 596 F.3d 1115, 1119-20 (9th Cir. 2010) (implementing a two-step extraordinary ability analysis); *see generally* 6 *USCIS Policy Manual* F.2(B), www.uscis.gov/policy-manual.

II. ANALYSIS

A. The Petitioner and His Field

The record shows that the Petitioner, an Iranian native and citizen, earned a bachelor of science degree in computer engineering from a university in his home country and worked in Iran for about a year as a software engineer. He decided to return to school and attained master of science and doctoral degrees in computer science in the United States. Since May 2024, a U.S. technology company has employed him as a machine learning engineer. Machine learning is an artificial intelligence field enabling computers to learn from data without explicit programming. Machine learning involves algorithms that can analyze data, identify patterns, and make predictions and decisions.

The Petitioner specializes in "deep learning," a machine learning subfield using artificial neural networks to process and analyze information. He conducts deep learning research, focusing on mitigating unintended consequences of deep models such as hallucination, toxicity, and non-factuality. He works with diffusion models, vision transformers, and model agnostic inversion. He seeks to continue his research in the United States.

B. The Evidentiary Requirements

The record supports SCOPS' findings that the Petitioner met the following evidentiary requirements:

- Participation as a judge of others' work in the field; and
- Authorship of scholarly articles in the field.

See 8 C.F.R. 204.5(h)(3)(iv), (vi).

[1] If an evidentiary criterion does not "readily apply" to a petitioner's occupation, they may submit "comparable evidence" to establish eligibility. 8 C.F.R. § 204.5(h)(4).

To satisfy additional criteria, the Petitioner's evidence must objectively meet the parameters of the applicable regulatory descriptions. *See generally* 6 *USCIS Policy Manual* F.2(B). '[N]either USCIS nor [the] AAO may unilaterally impose novel substantive or evidentiary requirements beyond those set forth at 8 C.F.R. § 204.5." *Kazarian*, 596 F.3d at 1121.

1. Original Contributions of Major Significance

This criterion requires "[e]vidence of the alien's original scientific, scholarly, artistic, athletic, or business-related contributions of major significance in the field." 8 C.F.R. 204.5(h)(3)(v).

When adjudicating this requirement, USCIS first determines whether a petitioner has made original contributions in their field. *See generally* 6 *USCIS Policy Manual* F.2(B)(1), Criterion 5. If so, the Agency then determines whether the original contributions are of major significance to the field. *Id.*

> For example, published research that has provoked widespread commentary on its importance from others working in the field, and documentation that it has been highly cited relative to others' work in that field, may be probative of the significance of the person's contributions to the field of endeavor.

Id.

SCOPS acknowledged the originality of the Petitioner's research. But SCOPS found insufficient proof that the work had major significance to his field. SCOPS concluded that citations to the Petitioner's research "do not reflect that your work is singled out as a major significance in the field; instead, your work is utilized as background information to the authors' work."

The record does not support SCOPS' findings. The Petitioner submitted evidence of nine published research papers in his field that he authored or co-authored between 2022 and 2024 and letters from four experts in the field discussing his work. As the Petitioner argues:

> Detailed letters from experts in the field explaining the nature and significance of the person's contribution may also provide valuable context for evaluating the claimed original contributions of major significance, particularly when the record includes documentation corroborating the claimed significance.

6 *USCIS Policy Manual* F.2(B)(1), Criterion 5.

One expert, a senior staff research scientist for a U.S. technology company, stated that he and his co-researcher cited the Petitioner's work on "cold diffusion." He said that they "referred to [the Petitioner]'s cold diffusion general model *to form the basis of our study* and we also used the results of his work to examine and compare the efficacy of our own sampling's method and inference algorithm." (emphasis added). Thus, contrary to SCOPS' finding, evidence indicates use of the Petitioner's work as more than "background information."

The same expert, who stated that he has never collaborated with the Petitioner, also discussed the Petitioner's development of a new algorithm for computer generative diffusion models, which are

often used for image generation, restoration, or transformation. He stated that the Petitioner introduced a new diffusion model that, unlike prior models, does not rely solely on "[redacted]" and supports a broader array of degeneration processes. The expert stated: "This opens new avenues for the development of deep learning diffusion models with sampling algorithms that have a stronger mathematical foundation."

Another expert, a U.S. computer science professor who served as the Petitioner's advisor, discussed the importance of the Petitioner's research on deep learning models. He stated:

> There is a growing reliance on machine learning systems in people's everyday lives, and while there is a great deal of research aimed at developing and optimizing new deep learning models and algorithms, limited knowledge regarding these models' underlying processes hinders scientists from exploiting their full capabilities. [The Petitioner] is dedicated to addressing these gaps in knowledge to elucidate the fundamental underpinnings of emerging models and support their optimization and application in deep learning systems.

Thus, the record contains evidence explaining the significance of the Petitioner's research.

SCOPS also found that, "[w]hile the petitioner's citations, both individually and collectively, show that the field has noticed the petitioner's work, the evidence does not establish that such rates of citation are sufficient to demonstrate a level of interest in the field."

As previously indicated, documentation that research has been highly cited relative to others' work in that field "may be probative of the significance of the person's contributions to the field of endeavor." 6 *USCIS Policy Manual* F.2(B)(1), Criterion 5. The Petitioner submitted evidence that, at the time of the petition's filing, 2023 computer science research papers averaged 1.61 citations. The record shows that, at that time, one of the Petitioner's 2023 papers had received 207 citations. Thus, his research generated widespread interest in the field and was highly cited relative to others' work in the field.

Further, the Petitioner submitted articles stating that, in computer research, papers accepted by academic conferences are as important as articles published in journals. The Petitioner submitted evidence that five top-rated conferences accepted his papers. The senior staff research scientist stated: "Conferences such as these require all article submissions to undergo an extensive peer-review process and only accept pioneering work of the highest quality and integrity." Thus, the Petitioner's conference articles also indicate that his research has major importance in the field.

The Petitioner has submitted evidence of original contributions of major significance in his field. We will therefore withdraw SCOPS' contrary finding.

2. High Salary or Significantly High Remuneration

The Petitioner has met the requisite minimum number of evidentiary requirements. We therefore need not consider his arguments that he submitted evidence that he commanded a high salary or significantly high remuneration relative to others in his field. *See INS v. Bagamasbad*, 429 U.S. 24,

25 (1976) (per curiam) (holding that agencies need not make "purely advisory findings" on issues unnecessary to their ultimate decisions).

C. Final Merits Determination

As the Petitioner has met the requisite minimum number of evidentiary criteria, USCIS must now conduct a final merits determination. SCOPS did not make such a finding. Rather than make one in the first instance, we will remand the matter for a final merits determination.

On remand, SCOPS must determine whether the Petitioner demonstrated sustained national or international acclaim and recognition of his achievements in the field identifying him as one of that small percentage who has risen to the field's very top. *See generally* 6 *USCIS Policy Manual* F.2(B)(2). SCOPS should consider any potentially relevant evidence of record, even if it does not fit one of the regulatory criteria or was not presented as comparable evidence. *Id.* The Petitioner's burden of proof includes explaining evidence's significance and how the materials demonstrate his sustained national or international acclaim and recognition in his field. *Id.* The petition's approval or denial should hinge on the evidence's type and quality. *Id.*

III. CONCLUSION

The Petitioner submitted evidence of original contributions of major significance in his field. USCIS must now conduct a final merits determination.

ORDER: The decision is withdrawn. The matter is remanded for a final merits determination and entry of a new decision consistent with the foregoing analysis.