



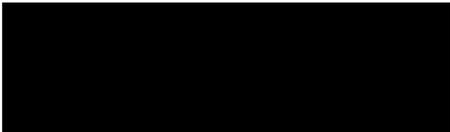
U.S. Department of Justice

Immigration and Naturalization Service

B5

PUBLIC COPY

OFFICE OF ADMINISTRATIVE APPEALS
425 Eye Street N.W.
ULLB, 3rd Floor
Washington, D.C. 20536



File: EAC-01-154-50680 Office: Vermont Service Center

Date: FEB 25 2003

IN RE: Petitioner:
Beneficiary:



Petition: Immigrant Petition for Alien Worker as a Member of the Professions Holding an Advanced Degree or an Alien of Exceptional Ability Pursuant to Section 203(b)(2) of the Immigration and Nationality Act, 8 U.S.C. 1153(b)(2)

**identifying data deleted to
prevent clearly unwarranted
invasion of personal privacy**

IN BEHALF OF PETITIONER:



INSTRUCTIONS:

This is the decision in your case. All documents have been returned to the office that originally decided your case. Any further inquiry must be made to that office.

If you believe the law was inappropriately applied or the analysis used in reaching the decision was inconsistent with the information provided or with precedent decisions, you may file a motion to reconsider. Such a motion must state the reasons for reconsideration and be supported by any pertinent precedent decisions. Any motion to reconsider must be filed within 30 days of the decision that the motion seeks to reconsider, as required under 8 C.F.R. 103.5(a)(1)(i).

If you have new or additional information that you wish to have considered, you may file a motion to reopen. Such a motion must state the new facts to be proved at the reopened proceeding and be supported by affidavits or other documentary evidence. Any motion to reopen must be filed within 30 days of the decision that the motion seeks to reopen, except that failure to file before this period expires may be excused in the discretion of the Service where it is demonstrated that the delay was reasonable and beyond the control of the applicant or petitioner. *Id.*

Any motion must be filed with the office that originally decided your case along with a fee of \$110 as required under 8 C.F.R. 103.7.

Robert P. Wiemann Director
Administrative Appeals Office

DISCUSSION: The employment-based immigrant visa petition was denied by the Director, Vermont Service Center, and is now before the Administrative Appeals Office on appeal. The appeal will be sustained and the petition will be approved.

The petitioner seeks classification pursuant to section 203(b)(2) of the Immigration and Nationality Act (the Act), 8 U.S.C. 1153(b)(2), as a member of the professions holding an advanced degree. The petitioner asserts that an exemption from the requirement of a job offer, and thus of a labor certification, is in the national interest of the United States. The director found that the petitioner qualifies for classification as a member of the professions holding an advanced degree but that the petitioner had not established that an exemption from the requirement of a job offer would be in the national interest of the United States.

Section 203(b) of the Act states in pertinent part that:

(2) Aliens Who Are Members of the Professions Holding Advanced Degrees or Aliens of Exceptional Ability. --

(A) In General. -- Visas shall be made available . . . to qualified immigrants who are members of the professions holding advanced degrees or their equivalent or who because of their exceptional ability in the sciences, arts, or business, will substantially benefit prospectively the national economy, cultural or educational interests, or welfare of the United States, and whose services in the sciences, arts, professions, or business are sought by an employer in the United States.

(B) Waiver of Job Offer.

(i) . . . the Attorney General may, when the Attorney General deems it to be in the national interest, waive the requirement of subparagraph (A) that an alien's services in the sciences, arts, professions, or business be sought by an employer in the United States.

The petitioner holds a Master's degree in computer software from the Institute of Software, Chinese Academy of Sciences. The petitioner's occupation falls within the pertinent regulatory definition of a profession. The petitioner thus qualifies as a member of the professions holding an advanced degree. The remaining issue is whether the petitioner has established that a waiver of the job offer requirement, and thus a labor certification, is in the national interest.

Neither the statute nor Service regulations define the term 'national interest.' Additionally, Congress did not provide a specific definition of 'in the national interest.' The Committee on the Judiciary merely noted in its report to the Senate that the committee had 'focused on national interest by increasing the number and proportion of visas for immigrants who would benefit the United States economically and otherwise. . . .' S. Rep. No. 55, 101st Cong., 1st Sess., 11 (1989).

Supplementary information to Service regulations implementing the Immigration Act of 1990 (IMMACT), published at 56 Fed. Reg. 60897, 60900 (November 29, 1991), states:

The Service believes it appropriate to leave the application of this test as flexible as possible, although clearly an alien seeking to meet the [national interest] standard must make a showing significantly above that necessary to prove the 'prospective national benefit' [required of aliens seeking to qualify as 'exceptional.']. The burden will rest with the alien to establish that exemption from, or waiver of, the job offer will be in the national interest. Each case is to be judged on its own merits.

Matter of New York State Dept. of Transportation, 22 I&N Dec. 215 (Comm. 1998), has set forth several factors which must be considered when evaluating a request for a national interest waiver. First, it must be shown that the alien seeks employment in an area of substantial intrinsic merit. Next, it must be shown that the proposed benefit will be national in scope. Finally, the petitioner seeking the waiver must establish that the alien will serve the national interest to a substantially greater degree than would an available U.S. worker having the same minimum qualifications.

It must be noted that, while the national interest waiver hinges on *prospective* national benefit, it clearly must be established that the alien's past record justifies projections of future benefit to the national interest. The petitioner's subjective assurance that the alien will, in the future, serve the national interest cannot suffice to establish prospective national benefit. The inclusion of the term 'prospective' is used here to require future contributions by the alien, rather than to facilitate the entry of an alien with no demonstrable prior achievements, and whose benefit to the national interest would thus be entirely speculative.

We concur with the director that the petitioner works in an area of intrinsic merit, computer science, and that the proposed benefits of his work, improved programming languages for reactive systems, would be national in scope. It remains, then, to determine whether the petitioner will benefit the national interest to a greater extent than an available U.S. worker with the same minimum qualifications.

In his decision, the director states, without explanation, that the petitioner had not demonstrated "that it would be contrary to the national interest if a labor certification were required for the beneficiary." It is acknowledged that *Matter of New York State Dept. of Transportation* defines the final threshold of eligibility in this manner. *Id.* at 217. The decision, however, elaborates on that threshold:

Stated another way, the petitioner, whether the U.S. employer or the alien, must establish that the alien will serve the national interest to a substantially greater degree than would an available U.S. worker having the same minimum qualifications. It is not sufficient for the petitioner simply to enumerate the alien's qualifications, since the labor certification process might reveal that an available U.S. worker has the qualifications as well. Likewise, it cannot be argued that an

alien qualifies for a national interest waiver simply by virtue of playing an important role in a given project, if such a role could be filled by a competent and available U.S. worker. The alien must clearly present a significant benefit to the field of endeavor.

The standard, then, is more complex than implied by the director's one-sentence conclusion. A petitioner can meet this threshold indirectly, by demonstrating his own contribution to the field. Specifically at issue is whether this petitioner's contributions in the field are of such unusual significance that the petitioner merits the special benefit of a national interest waiver, over and above the visa classification he seeks. By seeking an extra benefit, the petitioner assumes an extra burden of proof. A petitioner must demonstrate a past history of achievement with some degree of influence on the field as a whole. *Id.* at 219, note 6. The director cited a lack of "independent evidence." We will evaluate this conclusion.

Initially, the petitioner submitted letters regarding his work in China, his internship for Microsoft, and his current project as a Ph.D. candidate at Yale. At Yale, the petitioner works on a reactive computer programming project funded by the Defense Advanced Research Projects Agency (DARPA).

Dong Yunmei, Director of the Laboratory of Computer Science at the Institute of Software in China, discusses the petitioner's work on "SAQ," a project whose goal was to transform imprecise specification descriptions by a user into formal definitions by a computer. Professor Yunmei continues:

[The petitioner] did a lot of foundational work in the research of SAQ. For example, he brought forth the idea of forbidden rules, which lead to orders of magnitude of improvement on the concept learning speed, and eventually made SAQ practical. Also, [the petitioner] solely designed and implemented the Specification Library Management sub-system.

Professor Yunmei concludes by asserting that the petitioner won the Chinese Academy of Sciences (CAS) President Award in 1997, which Professor Yunmei asserts is granted to no more than one student in each institute of the CAS.

The petitioner also submitted a letter from [REDACTED] Chief Technical Officer and Vice President of Glory Networks, Ltd. in China. [REDACTED] asserts that the petitioner, while a part-time software engineer at Glory Networks, solved the problem of performing searches of Chinese text, which does not include spaces between words.

Rakesh Namineni, a software design engineer at Microsoft, discusses the petitioner's internship with that company during which time he worked on the company's Visual Studio product. Mr. Namineni provides general praise of the petitioner's ability to grasp problems and provide input and develop code.

Paul Hudak, a professor at Yale University, discusses the importance of domain specific language (DSL) programming, permitting easier and more reliable computer programs. Professor Hudak asserts that the petitioner has contributed to this area of computer science. Specifically, the petitioner designed and developed a new computer programming language, Functional Reactive Programming (FRP) for reactive systems like robotics, controlled systems, computer music, animation, etc. Professor Hudak asserts that FRP increases the speed and reliability of program production because programmers can express their ideas “in a highly declarative way.” Finally, Professor Hudak asserts that based on these advantages, “researchers at the Johns Hopkins University and the Oregon Graduate Institute have been using FRP actively in various research projects.”

Dr. John Peterson, a research scientist at Yale, asserts that the petitioner is “the chief architect and implementer of the core of the FRP language [REDACTED] continues:

[Our group has] successfully applied FRP in a variety of significant applications, including computer vision, writing interactive animations, building human-computer interacts, and, of course, programming robots in the DARPA MARS [Mobile Autonomous Robot Software] project. We have also used FRP in the DARPA SEC project to define high-performance control systems.

Tim Sheard, an associate professor at the Oregon Graduate Institute, asserts that FRP is a “foundation” for the Department of Defense’s MARS project, a project intended to develop and build on existing software technologies for use with autonomous robots in “partially unknown, changing, and unpredictable environments. [REDACTED] continues:

The key idea of MARS is to extend robot learning and control ideas with the reactive control ideas of FRP. This will revolutionize both the programming and utility of autonomous robots. These robotics will serve to reduce the cost to acquire and sustain military systems, extend the range of military hardware capabilities, and radically change how we think about, design, build, and employ future military systems.

Finally [REDACTED] asserts that the petitioner has been invited to referee for international journals, including the *Journal of Functional Programming*. This journal, according to Professor Sheard, is “the most prestigious journal covering functional programming.” The petitioner, however, provided no evidence from the journal itself to support this assertion.

The above letters are all from the petitioner’s collaborators and immediate colleagues. While such letters are important in providing details about the petitioner’s role in various projects, they cannot by themselves establish the petitioner’s influence over the field as a whole. In response to the director’s request for additional documentation, the petitioner submitted letters from more disinterested members of his field.

Gregory Hager, a professor at the John Hopkins University, asserts that his own work with vision-based interaction, visual tracking, medical robots, and software systems “has benefited greatly from the FRP language, for which [the petitioner] is a primary investigator.” Professor Hager further provides:

[The petitioner] offered two important contributions to FRP. First, to enable FRP for safety-critical systems, he developed a *semantics* for it, which precisely defines the meaning of a program, and therefore can be used to prove critical properties of it, like that it never enters a hazardous state. Second, to support real-time systems, he designed a variant of FRP, and proved that *any* program in this language will respond to stimuli within bounded time and only consume fixed amount of memory. This language is therefore a natural choice for real-time systems.

Convinced of the huge potential of FRP, I worked with the FRP group to tailor FRP for robotics. We have successfully used this dialect of FRP in the MARS program sponsored by the *Department of Defense*. Our experience is that FRP has significantly boosted our productivity. In one case, we were able to finish in less than one week a project that used to take two months using the traditional approach.

(Emphasis in original.) While the second paragraph quoted above suggests that Professor Hager is a collaborator of the petitioner’s, his letter suggests that his work was influenced by FRP and the petitioner’s contributions to FRP prior to this collaboration.

Dr. Ross Paterson, a lecturer at City University in London, asserts that he has become familiar with the petitioner’s work through abstracts appearing in international conference publications. Dr. Paterson continues:

FRP is highly regarded among the international programming language research community. It is the first system to utilize many of the latest ideas from modern programming languages research. As a result, FRP is high-level, and offers concise syntax, powerful abstraction, great flexibility, and a boost in productivity.

FRP is not merely innovative research. It has been successfully used in developing a variety of interesting control systems ranging from stage lighting control to robots. Researchers at Universität Tübingen, Oregon Graduate Institute, the Johns Hopkins University, Microsoft Research, Yale University, and etc[.], have reported that, using FRP, they are able to develop their systems an order of magnitude faster and the results are much more reliable than what they could have achieved using traditional tools.

Finally, Conal Elliott, a researcher with Microsoft Research, asserts that in 1997, he invented a language called Fran for writing interactive animation software, on which FRP is based. Mr. Elliott further states:

FRP targets not only animation, but also graphical user interfaces, computer vision, robotics, and control systems. In this process, [the petitioner] has made several important extensions to FRP that have made the language more efficiently implementable, more modular, more complete, and easier to use. This task required both solid mastery of programming language theory and rich experience in engineering, and [the petitioner] did an excellent job here.

In addition, [REDACTED] asserts that the petitioner solved a problem in FRP, permitting a programmer to now recognize and rewrite ill-formed programs. According to Mr. Elliott, the petitioner also designed a variant of FRP that eliminates previous FRP problems such as speed and large memory requirements. Finally, Mr. Elliott asserts that the petitioner “developed a provably correct strategy for translating [FRP] to a low-level language readily acceptable by a computer,” promoting the use of FRP.

Regarding the director’s concern that the record lacks “independent evidence,” the record would clearly be bolstered by letters of support from high-level officials at the Department of Defense and evidence that independent computer scientists have cited the petitioner’s five articles. Nevertheless, the petitioner did submit letters of support from individuals with whom he has not collaborated. These letters provide more than general praise of the petitioner’s abilities. Nor do they simply allege that the petitioner has unique or rare credentials. Rather, they cite specific accomplishments and improvements to FRP that are not merely predicted to be beneficial, but that have been adopted by computer science programmers in various places.

It does not appear to have been the intent of Congress to grant national interest waivers on the basis of the overall importance of a given field of research, rather than on the merits of the individual alien. That being said, the above testimony, and further testimony in the record, establishes that the community recognizes the significance of this petitioner’s research rather than simply the general *area* of research. The benefit of retaining this alien’s services outweighs the national interest that is inherent in the labor certification process. Therefore, on the basis of the evidence submitted, the petitioner has established that a waiver of the requirement of an approved labor certification will be in the national interest of the United States.

The burden of proof in these proceedings rests solely with the petitioner. Section 291 of the Act, U.S.C. 1361. The petitioner has sustained that burden. Accordingly, the decision of the director denying the petition will be withdrawn and the petition will be approved.

ORDER: The appeal is sustained and the petition is approved.