

ARGONNE NATIONAL LABORATORY

MATHEMATICS AND COMPUTER SCIENCE DIVISION
9700 SOUTH CASS AVENUE, ARGONNE, ILLINOIS 60439-4844

TELEPHONE

FAX:

EMAIL:

December 7, 2004

U.S. Department of Homeland Security
U.S. Citizenship and Immigration Services

RE: Dr.

Dear Sir or Madam:

I am writing this letter to support Dr. _____'s application for U.S. permanent residency under the category of Outstanding Researchers. I am providing this recommendation based on my expertise in the field of computer network and distributed systems.

I am the Associate Division Director of the Mathematics and Computer Science Division of the Argonne National Laboratory (ANL). I also hold a joint appointment as the Arthur Holly Compton Distinguished Service Professor in the Computer Science Department of the University of Chicago. I am a Fellow of the American Association for the Advancement of Science (2003), a Fellow of the British Computer Society (2002), and the recipient of the Gordon Bell Award (2001). I have served on the editorial board of the IEEE Transactions on Parallel and Distributed Systems, and have served as general chair, program chair or on the program committee for over 30 international conferences and workshops. I have authored or co-authored several books, including "The Grid: Blueprint for a New Computing Infrastructure" published by Morgan Kaufmann (2004), "Designing and Building Parallel Programs" published by Addison-Wesley (1995), and "Strand: New Concepts in Parallel Programming" published by Prentice Hall (1989). I have published over 200 papers in the field of distributed computing, computer networks and scientific computing.

I first met with _____ in a research workshop in 1998 when he was a Research Programmer at the National Center for Supercomputing Applications (NCSA). At NCSA, Dr. _____ developed a multicast monitoring system (called multicast beacon) that has been used in Argonne National Lab's Access Grid project for monitoring multicast network performance for video-conferencing over the Internet. I subsequently met him a few times in workshops and during his visit to the University of Chicago in 2004. I learned of his researches through our discussions, and I was very impressed by the originality and contribution of his work in mobile ad hoc networks, especially his proposal of an incentive scheme to enable packet forwarding that appeared in the 24th IEEE International Conference on Distributed Computing Systems (ICDCS 2004), and the location-guided multicast tree construction algorithms in ad hoc networks that

appeared in the Annual Joint Conference of the IEEE Computer and Communications Societies (INFOCOM 2002). These research results have the potential to substantially improve the efficiency and quality of network communications among mobile users.

Although still early in his career, Dr. [redacted] has an extensive list of publications in peer-reviewed international journals and international conferences, including the very selective ones such as the above-mentioned INFOCOM and ICDCS conferences. These conference proceedings and journals are highly respected and widely circulated in the international computer science research community. [redacted]'s work has been frequently cited and discussed by other researchers in the field. These factors substantiate the fact that Dr. [redacted]'s researches are recognized as original and outstanding in the research community. I would definitely rank him as in the top 5-10% among all the Ph.D. students in computer science graduated every year in the U.S. His employment in the U.S. is certainly a major contribution to the country.

Based the above, I believe that Dr. [redacted] has had original and outstanding contributions in the filed of mobile ad hoc networking, and his work has been recognized by other researchers in the international research community. Therefore, I strongly support his application for U.S. permanent residency under the Outstanding Researcher category.

Sincerely,

Dr.

Arthur Holly Compton Professor of Computer Science
University of Chicago

Associate Director
Mathematics and Computer Science Division
Argonne National Laboratory

UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN

Department of Computer Science
201 North Goodwin Avenue
Urbana, IL 61801-2502 USA



December 29, 2004

U.S. Department of Homeland Security
U.S. Citizenship and Immigration Services

RE: Dr.

Dear Sir or Madam:

I am writing this letter on behalf of Dr. [redacted] for the purpose of qualifying him as an Outstanding Researcher for his U.S. permanent residency application. I am providing this recommendation based on my qualifications and expertise in the field of computer networks and distributed systems as well as my familiarity with Dr. [redacted]'s researches as his thesis advisor.

I am an Associate Professor at the Computer Science Department of the University of Illinois at Urbana-Champaign. I have been working in the field of computer networking, multimedia, and distributed systems for more than 15 years. I have authored and co-authored more than 200 papers. I am the co-author of "Multimedia: Computing, Communications and Applications," a senior undergraduate and graduate-level textbook widely used by over 100 universities in the U.S. I was the recipient of the National Science Foundation's CAREER award in 1996 and the IEEE Communication Society Leonard Abraham Award in 2000. I am the editor-in-chief of the ACM/Springer Multimedia Systems Journal, and have served on the editorial boards for a number of journals, including IEEE Transactions on Multimedia, Elsevier Computer Networks Journal, and Kluwer Journal on Multimedia Applications and Tools. I have been a guest-editor for the Kluwer Computer Communications Journal and an associated editor of the ACM Computer Communication Reviews Journal. I have served as a program chair or co-chair and a member of the program committee for over 30 international conferences and workshops. Given my qualifications in the field, I can say with confidence that Dr. [redacted] has made original and significant contributions in mobile ad hoc networks that have received international recognition.

Dr. [redacted] joined my research group in June 2000 as a Ph.D. student and Research Assistant. During his Ph.D. study, he has conducted basic research in mobile ad hoc networks through research funds provided by the Office of Naval Research (ONR)'s Multidisciplinary University Research Initiative. He received his Ph.D. degree in October 2004.

Among all the Ph.D. students I have had during the past ten years, Dr. _____ is one of the most outstanding and successful. I would definitely rank him as among the top 10% Ph.D. graduates in our department (which is consistently rated as the top five Computer Science program in the nation by U.S. News). This is true by all criteria one may apply including:

- He has authored and co-authored six articles in peer-reviewed international journals, one book chapter, and nine papers in peer-reviewed international conferences and workshops. Dr. _____'s papers were accepted by some of the most selective and prestigious international conferences in the field, such as the 21st Annual Joint Conference of the IEEE Computer and Communications Societies (INFOCOM 2002) at New York City, and the 24th IEEE International Conference on Distributed Computing Systems (ICDCS 2004) at Tokyo, Japan, the IEEE Wireless Communications and Networking Conference (WCNC 2004) at Atlanta, Georgia, and the IEEE International Conference on Communications (ICC 2003) at Anchorage, Alaska. These conferences attracted first-class researchers from around the world and had an acceptance rate ranging from 17% to 30%. The journals and conference proceedings are widely recognized by and circulated within the international research community.
- He proposed location-guided tree (LGT) construction algorithms for small group multicast, which will enable people to efficiently exchange messages as a group while moving and using hand-held computers. This proposal, for example, can be implemented in a scenario of emergency rescue where a group of rescuers can effectively communicate with each other. This proposal was surveyed in detail in "Multicast over wireless mobile ad hoc networks: present and future directions," an article published in IEEE Network Magazine, 17(1), Jan.-Feb. 2003. It was also discussed in detail in an article entitled "Prioritized overlay multicast in mobile ad hoc environments" published in IEEE Computer Magazine, 37(2), Feb. 2004. Both magazines are widely circulated and highly visible in the international research community. Recently, Dr. _____'s follow-up research on this topic has been accepted to the International Journal of Wireless and Mobile Computing, Inderscience Publishers, Geneva, Switzerland.
- He conducted pilot research on several important mechanisms in ad hoc networking, including an incentive mechanism to enable packet forwarding, a rate-based explicit flow control scheme, and a mechanism to improve TCP performance. By applying these research results, network communication between mobile users will have substantially improved quality, speed, and efficiency.
- His work has been widely cited by independent researchers from around the world, including 14 journal articles and 31 international conferences and workshop papers.
- He has served as paper reviewer for over 15 international journals and over 25 international conferences, including the very prestigious journals such as IEEE Transactions on Networking and IEEE Transactions on Multimedia;

- He has given research presentations at several international conferences, and demonstrated his research results in the Research Funding Review Meetings at Cornell University to a team of researchers from the Office of Naval Research and the National Science Foundation for three consecutive years (2001-2003).

The above has provided abundant evidences that Dr. [redacted] has made many original research contributions in the field of mobile ad hoc networking that have been widely recognized by the international research community. It is on the basis of Dr. [redacted]'s above-mentioned achievements that I very strongly support his qualification as an outstanding researcher in connection with his U.S. permanent residency application.

Sincerely,

Associate Professor and Fisher Professor
Computer Science Department
University of Illinois at Urbana-Champaign

Phone:
Email:

October 17, 2004

U.S. Department of Homeland Security
Citizenship & Immigration Services

Dear Sir or Madam:

I am writing to enthusiastically support Dr. _____, an outstanding scientist in the field of computer science and engineering and an expert on automatic video processing and analysis, for his permanent residency petition in the category of Outstanding Researcher.

I am a University Distinguished Professor in the Department of Computer Science and Engineering at Michigan State University. I was the Department Chair between 1995-99. I have made significant contributions and published a large number of papers on the following topics: statistical pattern recognition, exploratory pattern analysis, neural networks, Markov random fields, texture analysis, interpretation of range images, 3D object recognition, document image analysis and biometric authentication. Several of my papers have been reprinted in edited volumes on image processing and pattern recognition. I received the best paper awards in 1987 and 1991, and received certificates for outstanding contributions in 1976, 1979, 1992, 1997 and 1998 from the Pattern Recognition Society. I also received the 1996 IEEE Transactions on Neural Networks Outstanding Paper Award. I am a fellow of the IEEE, ACM and International Association of Pattern Recognition (IAPR). I received a Fulbright Research Award in 1998, a Guggenheim fellowship in 2001, a Humboldt Research award in 2002 and the Pierre Devijver Award from International Association of Pattern Recognition in 2002. From 1991 to 1994, I served as Editor-in-Chief of the *IEEE Transactions on Pattern Analysis and Machine Intelligence*, which is the most prestigious technical journal in the research area of pattern recognition and image processing. I currently serve on the editorial boards of *Pattern Recognition Journal*, *Pattern Recognition Letters*, and *Applied Intelligence*. I have published eight books, 146 journal papers and more than 200 conference papers in pattern recognition and image processing.

I have known Dr. _____ since 1996 in several capacities. I interacted with him during several of my visits to the Computer Science Department at Hong Kong University of Science and Technology where _____ was a Ph.D. candidate.

also worked in my Pattern Recognition & Image Processing Laboratory (PRIP Lab) as a Research Associate during Sept-Dec, 1997. During this period, we worked on the problem of "Query by Video Clip". A paper based on this work was published in the Proc. 14th ICPR and an expanded version of the paper was published on Multimedia Tools and Applications journal. This paper developed video attributes based on color, texture and motion cues to define similarity between two video segments.

has been a member of the Institute of Electrical and Electronics Engineers (IEEE) and the IEEE Computer Society for several years. As a distinguished scientist in the field of pattern recognition, computer vision and image processing, he has been invited to review papers by various conference committees and professional journals.

Since the Sept. 11 attacks, more attention is been paid to the security issues in the United States. Video analysis has a great potential in improving the security of our citizens. A number of video techniques have been found to be useful for automatic analysis for surveillance applications.

has invented and published a number of video analysis techniques in international conferences, professional journals and has filed for several United States Patents. He has done some pioneering work in video scene detection, key-frame selection, video search and multimedia database.

During my interaction with , I found him to be extremely capable and knowledgeable in the areas of image processing, pattern recognition and multimedia. His research in video analysis is well regarded by his peers in this area. is energetic and enthusiastic about his work.

I believe that will continue to make valuable contributions to the United States. He has my strongest support for approval as an immigrant with extraordinary ability. Please do not hesitate to contact me if you require any further information.

Sincerely yours,

University Distinguished Professor