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The National Science Foundation
4201 Wilson Blvd
Arlington, VA 22230

Dear Program Officer,

It is my pleasure to write this letter of collaboration in strong support of Dr. Chao Wang's NSF proposal titled "SHF:Small:Collaborative Research: Systematic and Hierarchical Testing of Concurrent Software: A Cloud Computing Based Approach." Dr. Wang is an established researcher with many years of academic and industry research experience in this area, and the proposed research holds enormous promise for achieving strong results.

I am a Principal Member of Technical Staff in the Cyber-Physical Systems department at Sandia National Laboratories. Our mission is to research and develop advanced technologies and systems that contribute to the security of the nation. We focus on the analysis, demonstration, and deployment of cyber-physical systems to enhance the security of critical infrastructure and the safety of the public. In particular, our work in the area of formal verification of hardware and software has been expanding rapidly. That is why I find the research proposed by Dr. Wang very interesting.

In this proposal, Dr. Wang and his colleagues plan to investigate a bold and new approach to automated testing of concurrent software, where the massively parallel cloud computing infrastructure will be leveraged to scale up testing for concurrent software. The idea of leveraging the power of parallel computing to tackle the difficulty in testing parallel software is particularly appealing to me. I also like the idea of promoting cloud-based software testing as a service. At Sandia National Laboratories, we have a strong interest in advanced computing system related research activities, especially on the performance, reliability and security of mission-critical software systems. We look forward to future collaborations with Dr. Wang and his research team to try out their new techniques on our applications. We will also be glad to consider their students for summer internship positions in our group.

In summary, I strongly support this proposal by Dr. Wang and his colleagues since it holds enormous promise for achieving strong results and making significant contributions. Also I am very confident that his team will do a great job based on their expertise in the field.

Sincerely,

Yalin Hu