October 21, 2015

From,
Dr. Natarajan Meghanathan
Professor and Graduate Coordinator
Department of Computer Science

Subject: Application for HEADWAE Award for Calendar Year 2015
(Period Covered: June 1, 2014-May 31, 2015)

Dear Dr. Jackson,

I am hereby submitting my application package for nomination to the HEADWAE award for the calendar year 2015. The supporting documentation provided covers the period from June 1, 2014 to May 31, 2015. A brief summary of my salient accomplishments during this period is as follows: I have published a total of 6 peer-reviewed journal papers and 9 peer-reviewed conference proceedings papers. I have published a book on "Recent Advances in Ad hoc Networks Research," as an editor as well as author (out of 10 chapters in this book, I have written 3 chapters). I have created a YouTube channel and regularly post desktop-recorded videos (on advanced topics in algorithms, computer networks, graph theory and cyber security) in this channel for the benefit of the student community. I have about 950 subscribers to this channel that has more than 200 videos by now. In addition, I have employed the following teaching methods to improve student learning and understanding: development of question bank for each course module and discussing the solutions as and when the materials are covered in class; development of desktop-recorded videos for students to view before and after classes; requiring students to submit their project reports as video demonstrations and research papers; development of individualized take-home quizzes and exams for certain topics in the Algorithms class and advanced elective classes to facilitate comprehensive testing of the subject matter as well as necessitate an in-depth understanding for students on the subject matter; and infusing evidence-based learning to show evidence of application of the lecture topic in real-world scenarios. In October 2014, I gave an awareness interview to the JSU student magazine "Blue and White" about the perils of social media and how it facilitates hacking. During Fall 2014, I developed and taught two new senior-level undergraduate courses that were also taken by graduate students: CSC 499/539 Special Topics: Algorithms in Bioinformatics and CSC 499/539 Special Topics: Network Science. I served as PI or Co-PI for a total of three externally funded grant proposals for at least three months during the above period as well as had the Creative Award for Faculty Staff for the year 2014. I successfully completed two of these grants and submitted the final annual report and an annual report for the third grant. I serve as editor-in-chief of three international journals and serve in the editorial board of five international journals. I have also organized two international workshops in the areas of software security and graph theory applications of ad hoc and sensor networks. I also serve in the technical program committee of more than 10 international conferences and reviewed papers. During the above period, my papers have received more than 50 citations from peer-reviewed articles published in the literature. I have served in the PhD Thesis panel of several students from institutes in India. I have also presented three guest lectures at international conferences in India and a guest lecture at University of Mississippi on advanced topics in computing.

I very much appreciate your consideration of this application. If you need any information, feel free to contact me at natarajan.meghanathan@jsums.edu or 601-979-3661.

Thank you,

M. Natarajan
Natarajan Meghanathan