Dear Mathematics Teachers and Counselors:

It is with great excitement that I invite you and your 11th and 12th grade students to participate in the 37th Annual Jackson State University Mathematics and Engineering Fair which will be held on **Friday, March 31, 2017**, at the main campus. Registration begins at 7:45 a.m., and the closing ceremony which includes presentation of awards ends at 3:20 p.m.

This year the Mathematics and Engineering Fair theme is:

Your Place on the Grid: Big Data Influences on Your Life.

Regardless of what you are going to do in your daily life, there are always a large volume of data affecting and shaping your choices and decisions. Our society, as an accumulative system, has been collecting all kinds of data in different forms along the history of humanity. The growth rate of collected and stored data becomes even faster after the invention of computers and networks, which results in an exponential increase in the volume, velocity, and variety of obtained data. The effective utilization of such big data requires users' professional training in mathematical and statistical science, computer science, and the particular field knowledge related to the data. This year's fair is aimed at highlighting how data science behind big data is employed to discover patterns, forecast trends, and make better decisions in all activities linked with our daily lives. In particular, this emerging field of big data analytics offers a host of new career opportunities for people trained in the mathematical, statistical and computational sciences.

The Fair comprises individual team events that are designed to facilitate student engagement in learning experiences in which they can demonstrate their mathematical understanding, apply mathematics and scientific understanding, and learn about developing areas of mathematics. The Fair also includes opportunities for students to interact with JSU students and faculty in the College of Science, Engineering and Technology. We believe that these interactions will inspire and motivate your students to continue their studies in the STEM disciplines. Consequently, students who have demonstrated an interest in scientific and mathematical fields will benefit from participating in this Fair.

A list of student events and descriptions are attached. Please note that all student participants must take the Mathematics Written Examination and participate in at least one other competition. Additionally, you are encouraged to attend a seminar designed specifically for teachers while students complete their Mathematics Written Examination.

Your application for the Fair is due **March 1st, 2017.** Please complete the application that is attached and return it via email to <u>jun.liu@jsums.edu</u>. An email confirmation will be sent within two business days to confirm receipt of your application.

We look forward to an engaging fair that excites your students as they come to understand and recognize diverse career possibilities in mathematics-related fields.

We will send you another notice email in February to remind you the event application deadlines.

You may also contact us with questions or to request additional information using the following contact information.

Dr. Jun Liu
Department of Mathematics and Statistical Sciences
Jackson State University, P. O. Box 17610
Jackson, MS 39217
Phono: 601, 970, 3762

Phone: 601-979-3762 Email: <u>jun.liu@jsums.edu</u>

Wish you a Merry Christmas and Happy New Year in 2017.

Sincerely,

Jun Liu, Ph.D. 2017 JSU Mathematics&Engineering Fair Committee Chair Assistant Professor