



January 26th, 2024

To: Chancellor Franklin D. Gilliam, Jr., Ph.D.

From: Jing Deng, Head, Department of Computer Science

Re: Support of Continuing the M.A. in Mathematics and Ph.D. in Computational Mathematics Programs

Chancellor Gilliam,

I am writing this letter to request your support of the M.A. in Mathematics and Ph.D. in Computational Mathematics programs that have been put into the cutting block in the latest Academic Portfolio Reviewer (APR) process.

Higher education, including STEM educations, has recently been on the target of heavy cuts. This is particularly concerning with the huge economic, social, and technological benefits of these programs and the amazing research, teaching, and outreach activities that these departments are shouldering.

The graduate faculty and very often graduate students (M.A. and Ph.D. students) in the Department of Mathematics and Statistics help other STEM majors, Computer Science students included, open the door to critical thinking, sound mathematical explanation, and the idea of exploring the world of knowledge. Computer Science majors, currently numbered at around 550, all must take two math courses, MAT 196 and MAT 296, and our Introduction to Computer Science, CSC 130, requires MAT 190, Pre-calculus. One of the following two statistics courses must be taken, STA 271 and STA 290. These Math & Stat courses have frequently been taught by graduate students who are preferred by our majors because they interact more freely and are more like-minded.

The interactions among Math & Stat graduate students and our students have been traditionally strong and hugely beneficial, as demonstrated by the inclusion of the Math club doing introductions in our major's club day meeting. The cross pollination of ideas and research topics between Math & Stat graduate students and our students, undergraduate and graduate, have been repeatedly observed and highlighted, especially because of the proximity of our offices (both Math & Stat and Computer Science are housed in Petty Building on first and second floor). One rather procedural benefit was put on demonstration when our newly established Ph.D. program was not allowed to enroll international students because of a missed form submission, the Ph.D. in Computational Mathematics program came to the rescue as they helped house our new Ph.D. students all of whom happened to be international students until an official approval was later received from USCIS. Without their help, these Ph.D. students' graduation timeline would be delayed by one semester, if not one



whole year.

In summary, I would like to point to the tremendous benefits of continuing the M.A. program and Ph.D. program in the Department of Mathematics and Statistics. I am sure the Math & Stat department have solid data, financial and social, to back up this claim. The benefits of keeping these graduate programs would outweigh the small cost reduction of eliminating them, if any.

Thank you so much for your consideration!

Sincerely,

A handwritten signature in black ink, appearing to read "Jing Deng". The signature is fluid and cursive, with a large loop at the end.

Jing Deng, Ph.D., IEEE Fellow