February 16, 2021

R. Ayesha Ali
Associate Professor
Mathematics and Statistics
University of Guelph
50 Stone Road
Guelph, ON N1G 2W1

**Re: Proposed Master of Data Science**

Dear Dr. Ali,

I have reviewed the preliminary proposal (dated January 7, 2021) for the creation of a Master of Data Science led by the Department of Mathematics and Statistics. I am writing to express my strong support for this new program. The curriculum is well aligned with the proposed program's learning outcomes, which will equip students with the skills required to secure jobs and thrive in a growing field. The program also leverages existing talent in an area of strength at the University. Data Science is identified as a research signature area in the University's 2017-22 Strategic Research Plan. Moreover, this type of program, which is centered on aligning graduate outcomes with the needs of Ontario's economy, is identified as a priority area in the University's 2020-25 Strategic Mandate Agreement.

The proposed program was conceived by a working group that included participation from computer science professors David Calvert and Rozita Dara. The School of Computer Science members were consulted in three council meetings between January and February 2021. At the meeting on February 2, 2021, the School's faculty complement voted on whether the School should support the proposed Master of Data Science program with two newly developed CIS graduate courses, namely *Analysis of Big Data* and *Machine Learning for Sequential Data Processing*. The motion was passed for teaching up to 20 data science students in each course, where the enrollment constraint was based on the limited resource that SoCS has for offering graduate courses and the needs for reserving seats for SoCS graduate students. As the Data Science program grows beyond 20 students, then resource needs will be reevaluated and addressed in consultation with the Department of Mathematics and Statics, and the College of Engineering and Physical Sciences. SoCS is also supportive for our faculty members to contribute to one 4-week module in the capstone course *Applications of Data Science*. We have agreed to contribute the above-mentioned teaching loads on a full cost recovery basis, from a transfer of revenues generated by the program.

At least one computer science faculty member will also represent the School and its interests on the Data Science Advisory Committee, which will provide strategic oversight and curriculum review for the program, as well as inform program enhancement/renewal. In turn, the computer science committee member(s) will bring potential issues or concerns back to the School for broader consultation.

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Our School's contributions to the proposed program will help strengthen connections between our two units and take advantage of our complementary expertise in data science. We have a longstanding history of collaboration on other programs, including Bioinformatics and the Collaborative Specialization in Artificial Intelligence. We are pleased to expand on these connections by contributing to the proposed Master of Data Science.

Finally, the proposed program's focus on job readiness and industry needs promises to attract a strong pool of domestic and international applicants—which will benefit our college and the University.

In summary, the School of Computer Science strongly supports the proposed Master of Data Science.

Minglun Gong
Professor and Director
School of Computer Science, University of Guelph

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