DEPARTMENT OF MATHEMATICS AND STATISTICS
College of Science and Engineering

To whom it may concern January 2021

I am writing in strong support of Dr. Todd Iverson's application for Tenure and Promotion at Winona State University. Since joining the Mathematics and Statistics department back in Fall 2016, Dr. Iverson has been a tremendous asset to our department, especially in developing curriculum for our Data Science major.

I will specifically speak to my own personal experience teaching DSCI 210, our introductory Data Science course, for the first time in Fall 2019. When we first offered this course prior to Dr. Iverson's arrival at Winona State, we were very much "feeling around in the dark" with the course. Data Science was a very new field in general, and there was little in the way of established curriculum upon which to base the course. However, by the time I taught the course, after Dr. Iverson had taught it several times, it had developed into a very impressive course. Its conceptual flow was strong and the assignments were high-quality, effectively reinforcing class concepts. Dr. Iverson had discovered an important data cleaning tool, OpenRefine, and introduced it to the course. Students glommed onto this tool and used it in subsequent data analytics competitions. OpenRefine is now a mainstay of the course. But Dr. Iverson's most important contributions to this course, and to the Data Science curriculum as a whole, is a "software agnostic" philosophy. "Data Science" is not the learning of *tools*, or a pedagogy centered around e.g. "learning how to code in Python" (though these tools are definitely important). Rather Dr. Iverson has helped us as a department realize that Data Science has *theoretical* and *conceptual* foundations that transcend any one tool, and advocated for a curricular approach that exposes students to a *variety* of tools with the idea that they should *use the right tool for the job*. This has greatly strengthened our program and this philosophy touches all aspects of our curriculum, from management of structured data to data visualization.

Dr. Iverson has also developed two entirely new, upper-level courses to our curriculum (DSCI 330: Management of Unstructured Data and DSCI 430: Data at Scale). I was able to sit in on DSCI 330 last semester and learned a lot about the challenges students will face with messy data in the workplace and the Python coding tools they can use to tackle those challenges. These are both very strong courses and stellar additions to our Data Science curriculum. Suffice to say, Dr. Iverson has been a boon for our Data Science program.

Another way Dr. Iverson has had a positive effect on my own teaching is his flipped class model for STAT 110. Right before he arrived at Winona State, I was beginning to consider flipping my own STAT 110 classroom but was daunted by the many logistical challenges of this rather major revision to my teaching style. Having his experience on the scene was instrumental as I was able to bounce questions off him, and provided me the push to finally get around to flipping my own STAT 110 classroom. It has been an immense improvement to my own pedagogy and I do not know if it would have happened without him.

Dr. Iverson is also an excellent colleague and collaborator. I have developed and presented several workshops with him at national and international conferences. He is easy to work with and an exceptionally positive contributor to any collaborative environment.

In summary, Dr. Iverson has been an indispensable addition to our department and is fully meriting Tenure and Promotion.

Sincerely,

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