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Teaching Statement

I have been assigned as a primary instructor of undergraduate econometrics classes five times. Also, I was a teaching assistant for a first-year Ph.D. econometrics class. I am willing to develop forecasting or time-series econometrics classes. In the future, I would like to develop classes such as public economics and labor economics with a strong emphasis on applications using real-world data. I am also interested in building an applied economic course with a focus on big data applications. More importantly, I can and am willing to develop both micro and macroeconomics classes.

In teaching econometrics, I aim to emphasize the connection with economics. To motivate students, I stress that econometrics is useful for answering economic questions. Then I introduce examples that are related to other sub-fields of economics. For example, running a regression with firm data was an effective homework question with which students could review important concepts of microeconomics. In this way, students can both review important economic concepts and learn econometric tools.

Central to my teaching philosophy is how to help students apply theoretical concepts to solve real-world problems. As an instructor of econometrics class, I put a strong emphasis on teaching basic coding skills to students. I organize the class so that each assignment is comprised of 50% theoretical questions and 50% of application questions. For the application questions, each student is asked to submit their coding script for the assignment. As the real world continually changes, I adapt the materials so that students will be able to use what they learn in the class in the future. For example, at the beginning of 2020, as demand for Python in the data industry increased, I encouraged students to submit their assignments using Python. In addition to teaching coding skills, I aim to teach econometrics methods that are state-of-the-art but also digestible to undergraduate students; near the end of each semester, I taught the basic introduction of the impact evaluation methods such as Difference-in-Difference and Regression Discontinuity Design.

Emphasizing practicality does not mean that I disregard the value of teaching theoretical concepts. Rather, I put a lot of effort into motivating students for theoretical parts. In my teaching experience, I have often seen students start

losing their focus when they learn some relatively more difficult theoretical concepts. I have found that such loss of motivation of students is due in part to their not understanding why we need the theoretical concepts. Thus, every time I teach a new theoretical concept, I focus on motivating students by explaining (i) why we need the theory and, if applicable, (ii) examples demonstrating the usefulness of the theoretical part. For example, in econometrics, it is often the case that some students do not understand the point of learning the unbiasedness and efficiency of an estimator. In this case, I try to introduce the notion of these two concepts intuitively first and then explain what could go wrong if unbiasedness and efficiency are ignored in assessing the performance of an estimator.

I have teaching experience in both in-person and online classes. On the one hand, I highly value in-person interactions with students. I always prepare questions that I ask students during the class to make the in-person interactions productive. By asking questions to students, I can check whether students and I are on the same page. On the other hand, I am comfortable with teaching an online course. In Spring 2020, when half of the class had to be taught virtually due to the COVID-19 pandemic, the number of questions during the regular class time significantly dropped. I started holding an interactive Zoom Q&A session in addition to the regular class. In this session, I accepted questions through the Zoom chat function, which turned out to be an effective way of interacting with students: Students who had not asked questions in person started asking multiple questions in the session. My teaching style is well-recognized by my students, which can be seen in my teaching evaluations.

In the future, I am eager to develop a course connecting big data with economics. A good example is Professor Raj Chetty's class titled "Using Big data to Social and Economic Problems." This course is composed of real-life applications that are closely related to economics. I am able to build a course in line with his class. If I can organize such a course, I would like to start with real-life data applications, then gradually introduce economic concepts related to the examples. I believe such a course is an excellent way to introduce economics to students of other majors.

I have been very fortunate to meet many exceptional teachers who inspired me to become one of them. I am eager to keep improving my teaching skills and adapt my course materials to satisfy the changing needs of students and the real world. Teaching and research are both indispensable for a university scholar, and I believe investing in teaching pays off by helping me become a better researcher.