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Teaching Statement

My teaching experience ranges from giving traditional lectures on technical or substantive topics, to leading discussion seminars, to working with students to develop and conduct a research projects, to leading interactive sessions to teach statistics and coding. The courses I have previously taught are as follows:

- In Spring of 2018, I taught a short course on machine learning for the social sciences for graduate students and faculty at the University of Geneva Department of Politics and International Relations.
- In Spring 2016, I was the teaching assistant for the 'Big Data in Finance' Master's-level course in the Department of Mathematics at the City University of New York - Baruch College. I taught sessions on using the high performance computing cluster, parallel programming in C++, and Apache Spark. I designed and evaluated an assignment on using Spark to analyze Twitter data to predict stock returns.
- In the Spring semester 2014, I was the teaching assistant for the undergraduate-level 'Power and Politics in America' class with Christopher Dawes, where I introduced students to the basics of political science ranging from theory and knowledge of the political process to the principles of research design and regression analysis.
- In Fall 2013, I was the teaching assistant for the Ph.D.-level 'Quantitative Methods I' course on statistics and basic econometrics at New York University, with Patrick Egan. I was responsible for reviewing knowledge of statistical and econometric ideas, teaching coding using Stata, and grading coursework.
- In 2012-2013 I was the teaching assistant for the year-long undergraduate International Relations Senior Honors Seminar. This involved teaching students research methods, basic use of Stata, and also meeting with them individually to help them progress towards completion of a research paper.

In addition, my 2013 seminar for the NYU Politics Data Lab on web scraping using Python has 35,360 views.

Teaching Philosophy

The focus of my teaching in political science is to help students learn how to theorize about the social and political world, define valid empirical tests, and contextualize this within the work of scholars who have come before. Teaching is thus not about merely communicating facts but must involve students in the iterative scientific process, because in this way students are likely to learn more and to be motivated to continue their inquiry in the future. With apologies to Kant, information without hypotheses is empty; curiosity without knowledge is blind.

Teaching at its best can also be a joint exploration of the bounds and direction of our knowledge. Like the *Elenchus* of Socrates, it is a dialectical process in which individuals with different beliefs explore and deepen their understanding, making manifest what is

often only implicit, nascent, and more often than not confused or ambiguous. A good scholar sees teaching as an opportunity rather than a burden, knowing that many of the greatest advances of research come from questioning approaches and assumptions that have calcified in the minds of experienced scholars.

Practically, in the classroom, this means being honest, transparent, and rigorous with students, neither treating them as incapable of doing top quality research nor confounding them with arcane terminology or overly pointed technical details. This balance can only be achieved by eliciting students to explain their understanding, else the professor will discover in reading the final exam that the students misunderstood fundamental basics.

Success also means maintaining high expectations and clear methods for evaluation, and challenging students to explore beyond their comfort zone, whether that be in terms of technical expertise or challenging their assumptions about how the world works or what constitutes a valid explanation for a political phenomenon.

In line with my research, I would be interested in teaching courses in data science focusing on machine learning, research design and text analysis, as well as substantive political science courses on comparative and legislative politics.

Teaching Evaluations

The full text of my teaching evaluations are attached and are available online at https://goo.gl/PxXKff. Additional teaching materials have been made available on Github at: https://github.com/aristotle-tek/ ("Machine_Learning_SS", "cuny-bdif", "BeautifulSoup_pres").

While I have followed the practice of having students fill out multiple choice evaluations (presented in Table I below), I also felt that this has a tendency to narrow the thinking of evaluators, when in fact students should be actively thinking about the learning process and how it could be improved (especially when they are PhD students). For this reason, for the PhD Quantitative Methods I class I also experimented with giving students a blank piece of paper and asked them to write the aspects that were good and those that could be improved. As I believe you will see from the full text online, these evaluations are far more informative than the bubble-filling approach.

Table 1: Mean Evaluation by Question

	IR Senior Seminar ('12-'13)	Quant I (Fall '13)	Power & Politics (Spring '14)	Big Data & Finance (Spring '16)
TA's knowledge of the subject	5.00	5.00	4.44	5.00
TA's preparation for class	4.71	5.00	4.11	5.00
TA's fairness in grading	4.86	5.00	4.22	5.00
TA's approachability outside of class	4.86	4.86	4.22	4.85
Overall quality of the TA compared to TAs at the university	5.00	5.00	3.78	4.85
Overall quality of the TA compared to TAs in the department	4.86	5.00	3.78	5.00

Selected quotations from anonymous student reviews:

> "Outstanding TA both in terms of accessibility and knowledge on the subject matter. Andrew had great skill in simplifying methodology in a way that was digestible for first-year PhD students without much prior exposure to the subject matter." (Quantitative Methods I)

> "The TA was always knowledgeable about course material... He was a good educator. He was always able to make me understand the material... He was approachable and polite." (Power & Politics in America)

> "Andrew commands respect simply by his own accomplishment & work, and is able to connect by speaking to students as peers which is the most effective way to communicate... Andrew is clearly very *knowledgeable* but also clearly very *genuinely curious* about the field which I thought made him very *relatable*, *easy to talk to* & learn from. He is willing to put in the time to make sure that his students succeed, which is incredibly reassuring and *motivating*. (International Relations Senior Seminar)

> "Andrew was the best TA I have had at NYU. He really cared about his students and it was a pleasure to be in his class." (International Relations Senior Seminar)

> "He was a wonderful TA as well as a great person to work with... Extremely knowledgeable with hands on experience in the areas we studied (big data, [Apache] Spark, using super computer clusters)" (Big Data in Finance)