JMM 2020 Panel Proposal

So You Want to Start an Undergraduate Statistics or Data Science Program?

Confirmed Panelists:

* Dr. Kimberly Roth, Juniata College
* Dr. Judith Canner, California State University, Monterey Bay
* Dr. Albert Kim, Smith College

Questions and discussion

Justification, what committee should consider.

The demand for statistical and data science skills in the workplace continues to grow, and more and more universities are adding undergraduate programs to accommodate the growing demand. The number of Bachelor’s Degrees granted in Statistics has skyrocketed since 2010 to over 3,000 students annually, with the number of universities granting such degrees also steadily climbing (American Statistical Association). In 2015, the American Statistical Association reported that Data Science was the fastest growing undergraduate STEM degree, with the number of undergraduate data science degrees granted nearly doubling in four years.

However, universities have had varying success with starting programs and recruiting the necessary faculty. For example, many searches for Statistics and Data Science faculty are unsuccessful for multiple years in a row. Panelists will discuss the logistics of starting such programs at their respective universities. Particular attention will be given to the design process and timeline for implementing these degree programs, how the type of university affects the ability to start such a program, and what the recruitment process looks like for both faculty and students. The timeline for hiring Statisticians and Data Scientists can differ extensively compared to the traditional Mathematics timeline, so panelists will address how they found success in hiring Statistics and Data Science faculty. The panelists will also discuss the Curriculum Guidelines for Undergraduate Programs in Data Science and Statistical Science.

Confirmed panelists include the following:

* Dr. Kimberly Roth, Juniata College
* Dr. Judith Canner, California State University, Monterey Bay
* Dr. Albert Kim, Smith College

Panelists come from a range of universities (small liberal arts, regional comprehensive, etc) with varying degree programs (minors and/or majors in Statistics and/or Data Science). Attendees will have ample time to ask questions about planning and implementation of such programs. Additional panelists will be sought if the panel proposal is accepted, in particular representing R1 universities. This panel will enable more colleges and universities to meet the increasing demand for undergraduate Statistics and Data Science degree programs.

Short Version

The demand for statistical and data science skills in the workplace continues to grow. In response, the number of Bachelor’s Degrees granted in Statistics has skyrocketed since 2010 to over 3,000 students annually. In 2015, Data Science was the fastest growing undergraduate STEM degree, with the number of data science degrees granted nearly doubling in four years (American Statistical Association). However, universities have had varying success with starting programs and recruiting the necessary faculty. For example, many searches for Statistics and Data Science faculty are unsuccessful for multiple years in a row. The panelists come from a range of universities (small liberal arts, regional comprehensive, etc) with varying degree programs (minors and/or majors in Statistics and/or Data Science). Panelists will discuss the logistics of starting such programs at their respective universities. Particular attention will be given to the design process and timeline for implementing these degree programs, how the type of university affects the ability to start such a program, and what the recruitment process looks like for both faculty and students. The panelists will also discuss the Curriculum Guidelines for Undergraduate Programs in Data Science and Statistical Science.