1086-VI-977   **Jason J. Molitierno*** (`molitiernoj@sacredheart.edu`), Department of Mathematics, Sacred Heart University, 5151 Park Avenue, Fairfield, CT 06825-1000. *Visualizing Distributions in a Probability & Statistics Class.*

In an undergraduate Probability & Statistics class, students learn about many types of distributions, both discrete and continuous. In this talk, I discuss three projects that I give to my students which give students to opportunity to visualize, compare, and analyze these distributions. We begin with an Excel project on discrete distributions in which students produce histograms of the binomial, negative binomial, and Poisson distributions. Students are asked to write an analysis comparing the histograms produced when various probabilities are inputted. We then move on to continuous distributions in which the project focuses on the exponential distribution and its comparison to the Poisson distribution. Finally, students do a Maple project on joint distributions which enables them to visualize probability scenarios involving more than one variable. These projects are an opportunity for students to enhance their analytic and writing skills. (Received September 17, 2012)