Abstract: Statistics, computer science, and domain-specific knowledge are converging to form a new field: data science. This new field is garnering much attention - data scientist is consistently rated as the top job in America, with Houston ranked as the top data science market in the country and Austin following closely behind. Because it is a new field, there is an opportunity for new ideas and new entrants to define what data science is and will become.

In this presentation, I will highlight some contemporary and future applications of data science to health problems, with a focus on supervised and unsupervised machine learning. I will also address how statisticians are in the best position among scientists to take a leadership role in this emerging field.

Alessandro De Nadai is Assistant Professor of Psychology at Texas State University. He conducts applied health research using data science and machine learning, with a focus on mental health. He serves on the executive committee of the Mental Health Statistics Section of the American Statistical Association, and he is co-leader of the Clinical Research Methods and Statistics Special Interest Group of the Association for Behavioral and Cognitive Therapies. He is the author of over 50 scientific manuscripts and has current NIMH and private foundation funding to support work that uses machine learning to solve problems in mental health.