

1163-90-685

**Arnold Greenland\*** ([arnie.greenland@gmail.com](mailto:arnie.greenland@gmail.com)), College Park, MD 20742. *Introduction to Driving Transformation Through Advanced Analytics*. Preliminary report.

The field of that has come to be known as .analytics. has experienced a huge revolution in the last decade. It brings together mathematics, statistics, operations research, multiple fields of engineering, and many other application areas that are data rich, yet in need of efficient ways to leverage that data for good. This special session contains a diverse variety of topics showing how advanced analytics, in many cases using advanced mathematical approaches such as machine learning, optimization, simulation, and related fields to bring important applications to society and business. This talk includes an introduction to advanced analytics for those who are newcomers to the concept and provides a window into how the session is organized and what are some of key areas that are covered in the remaining talks of the Session. Examples in this talk will be taken from the area of interest for the author, which is machine learning applied to fraud detection. (Received September 11, 2020)