Keynote Address

Keynote-Wednesday 12:30 PM EDT
Title: Modelling the COVID-19 Pandemic
Presenter: Michael O'Connell, Tibco

Abstract:
As we continue to battle the first wave of the COVID-19 pandemic, many countries and US states are in the beginning stages of reopening. This poses some interesting challenges related to reopenings of countries and local jurisdictions, as well as retail stores and other businesses, while mitigating further risk of COVID-19.

We have been analyzing COVID-19 data using sound data science, visual analytics, and data management methodologies, and making these analyses available to the public via our COVID-19 TIBCO Spotfire Analytics Hub as part of our TIBCO4Good program. The analyses include:

- GeoSpatial analyses and timelapse views showing outbreak hotspots
- Models estimating the effective reproduction number (Re) over time for local regions worldwide
- Cluster analysis of case and fatality curves

We have also been exploring the SARS-CoV-2 genome and mutations; and tracking the progress of therapies including repurposed drugs, antibody treatments, and vaccines.

This presentation covers highlights of this work, with emphasis and demonstrations of analytics apps created using Spotfire visual analysis software and related technologies.

Bio:
Michael O'Connell is Chief Analytics Officer at TIBCO Software, where he works with TIBCO customers and product teams to develop analytic solutions and provide input for product evolution. Michael has much experience in analytic applications across Financial Services, Energy, Life Sciences, Consumer Goods & Retail, and Telco, Media & Networks. His current passion is driving Insights to Action, combining visual and predictive analytics with event streams for optimizing business operations. Michael did his Ph.D. work in Statistics at North Carolina State University and remains Adjunct Professor Statistics in the department.