

# DATA SCIENCE SEMINAR SERIES

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FRIDAY, MAY 5, 2017

1:30—3:00 PM

ROOM 505, ALTER HALL

TEMPLE UNIVERSITY

## USING CONTENT GENOME TO PREDICT DEMAND FOR TELEVISION CONTENT

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Data science has become a regular part of how the entertainment industries make decisions regarding the distribution and promotion of creative content, inspired in part by a fair sized body of empirical academic research on such issues. However, empirics have made much less headway in influencing creative and production decisions, an area long dominated by “gut feel”.

In this research, Danaher attempts to bring together machine learning, sentiment analysis, web scraping, and other methods to create a “content genome” for television – a set of variables that can describe any television show and that may explain that show’s appeal. I then test a variety of models to determine whether this genome has meaningful predictive power.

The research is in progress, but currently he finds that that his content genome does not perform well in trying to predict overall worldwide demand for a television show. However, the genome can meaningfully predict differences in popularity of a show across different cultures or groups of people (for example, shows with politics as a theme underperform in the US relative to performance abroad). Danaher discusses business use cases for this model as well as goals for improving the genome in order to increase the level at which it can predict television success.