

FRRIS



The Need for Interpretability



INFORMATION

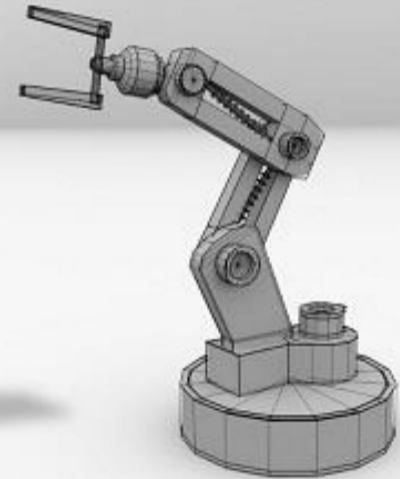
NETWORK DRIVER

Autonomous Mode

Autonomous
Navigation
Communication
Navigation
Navigation
Navigation



What can I help
you with?





High
-11°
Cloudy. Winds
E 13.



LOW
-13°
Cloudy. Winds E 13.
Chance of

High
4°
Cloudy. Winds E 13.
Chance of





TKRKB.
8.13.13

Sorry, the system says
you've been denied.



BIZARROCOMICS.COM



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"This book is downright scary—but...you will emerge smarter and more empowered to demand justice." —NAOMI KLEIN

AUTOMATING INEQUALITY

HOW HIGH-TECH TOOLS PROFILE,
POLICE, AND PUNISH THE POOR

VIRGINIA EUBANKS

Book cover for 'Automating Inequality' by Virginia Eubanks. The top half features a woman reading a book in bed with colorful streamers. The bottom half shows a server room with a chair in front of a rack. The title 'Automating Inequality' is in large red letters, and the subtitle 'How High-Tech Tools Profile, Police, and Punish the Poor' is in smaller white letters. The author's name 'Virginia Eubanks' is at the bottom.

HOW HIGH-TECH TOOLS PROFILE,
POLICE, AND PUNISH THE POOR



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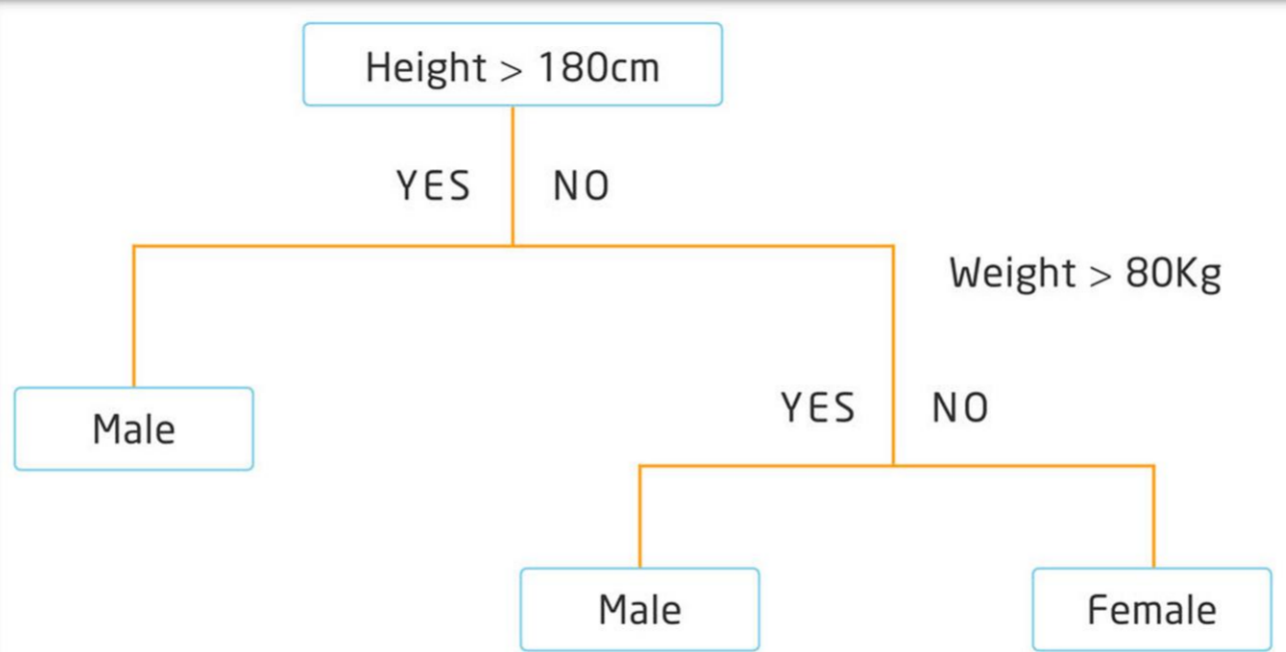
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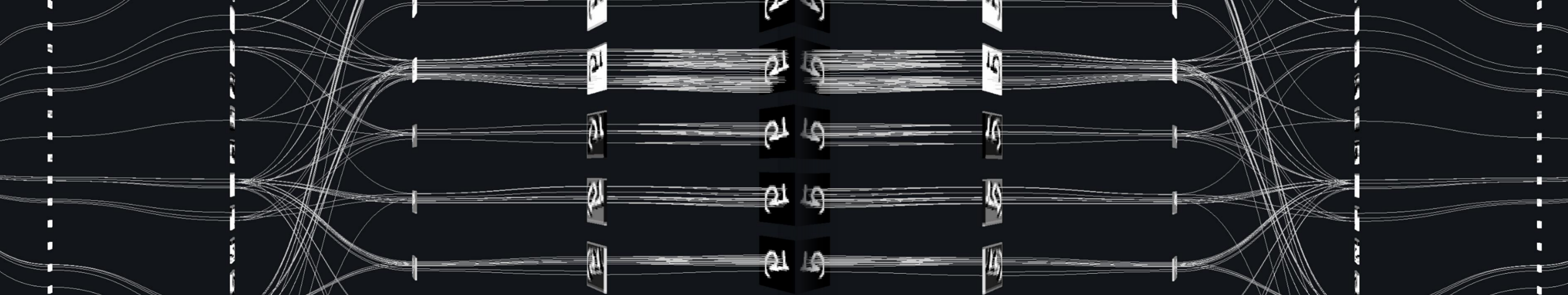
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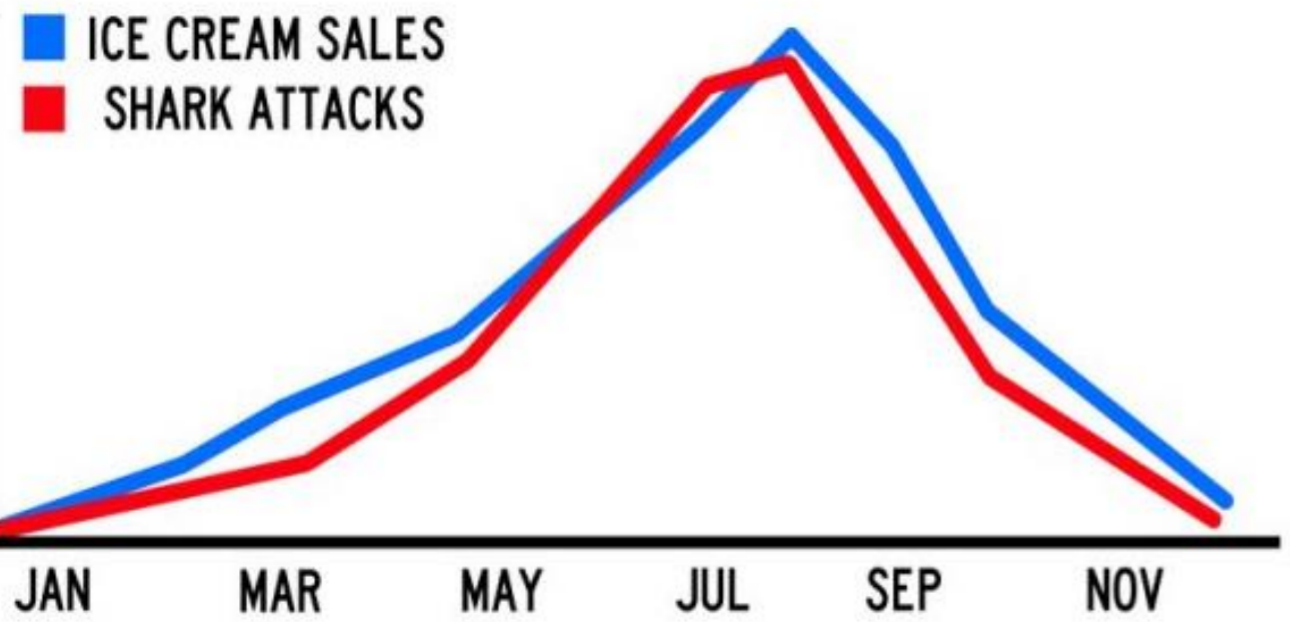
“Interpretability is the degree to which a human can understand the cause of a decision.” (Miller 2017).

Decision Trees



Decision Trees





JAN

MAR

MAY

JUL

SEP

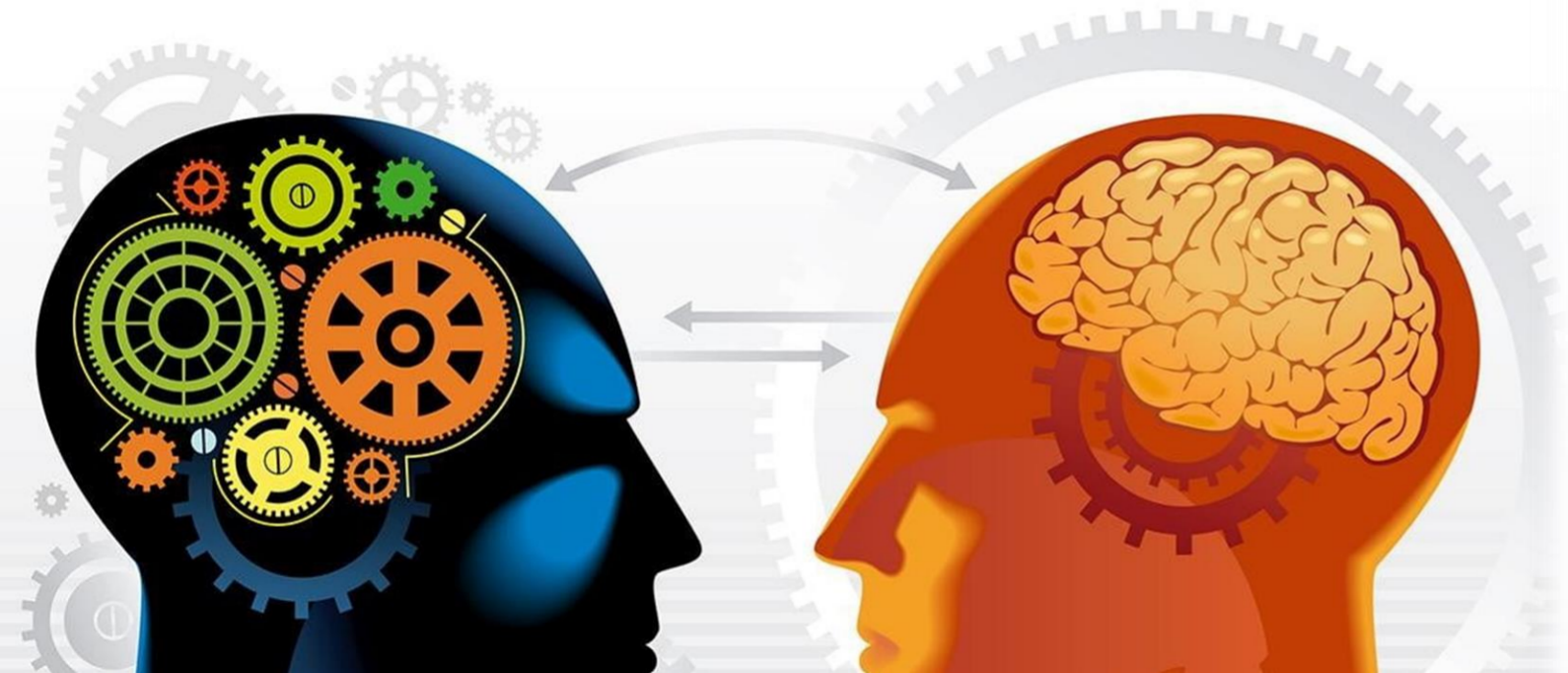
NOV

ICE CREAM SALES

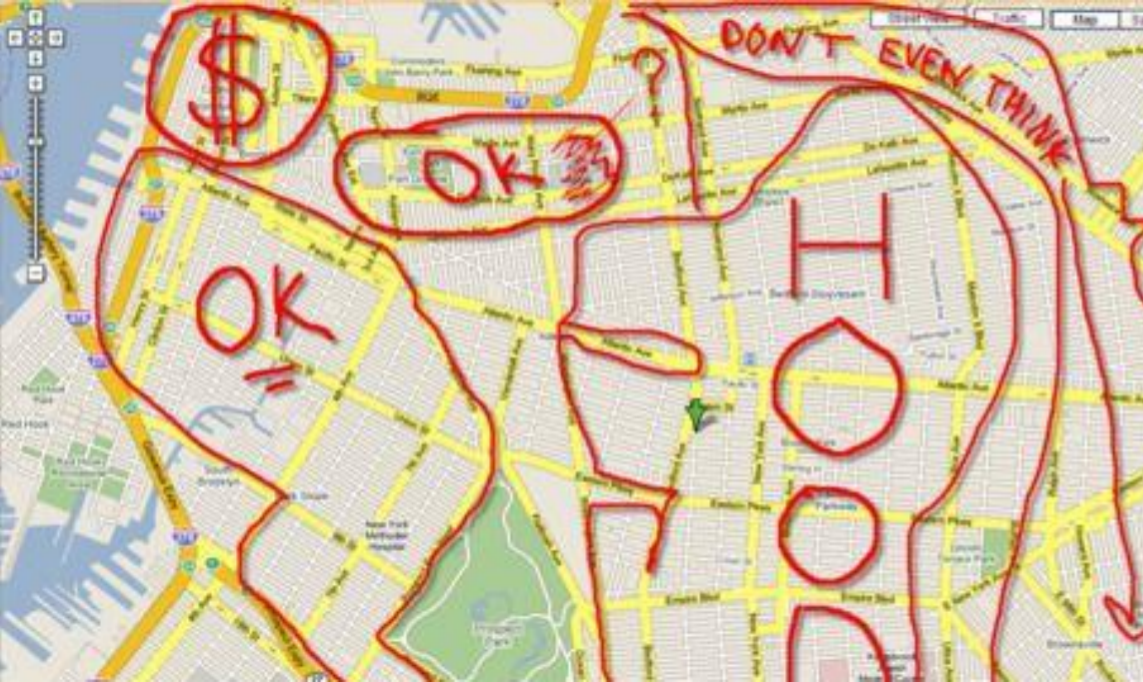
SHARK ATTACKS

Correlation is not causation!





Data reflects society



OUR CLASSIFIERS



High IQ



Academic Researcher



Professional Poker
Player



Terrorist





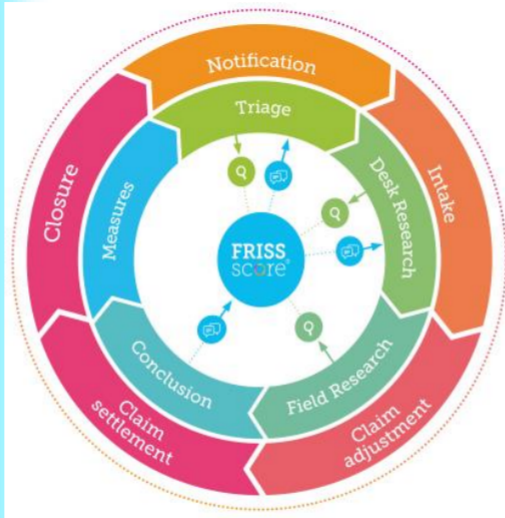
FRISS



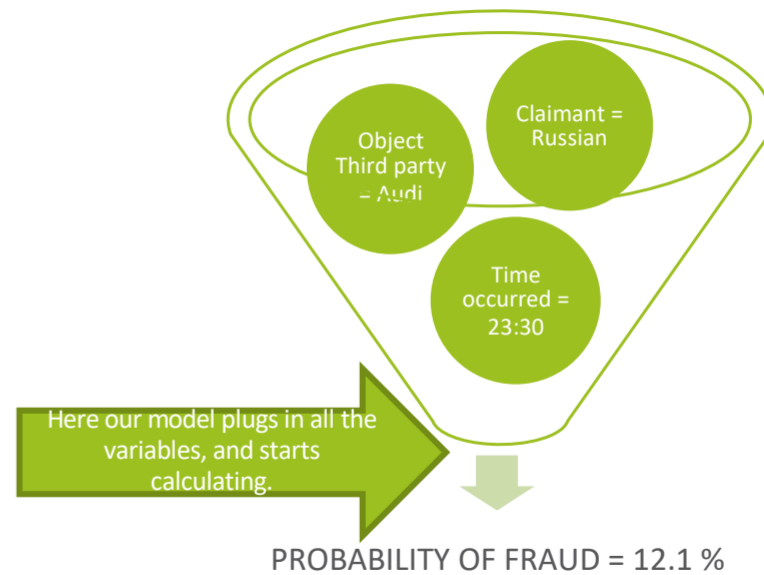
 Underwriting



 Claims



 SIU





- Enhanced LIME
- Created real time, on the click
- Feature descriptions more human-readable

FRISS Fraud Model Visualizer

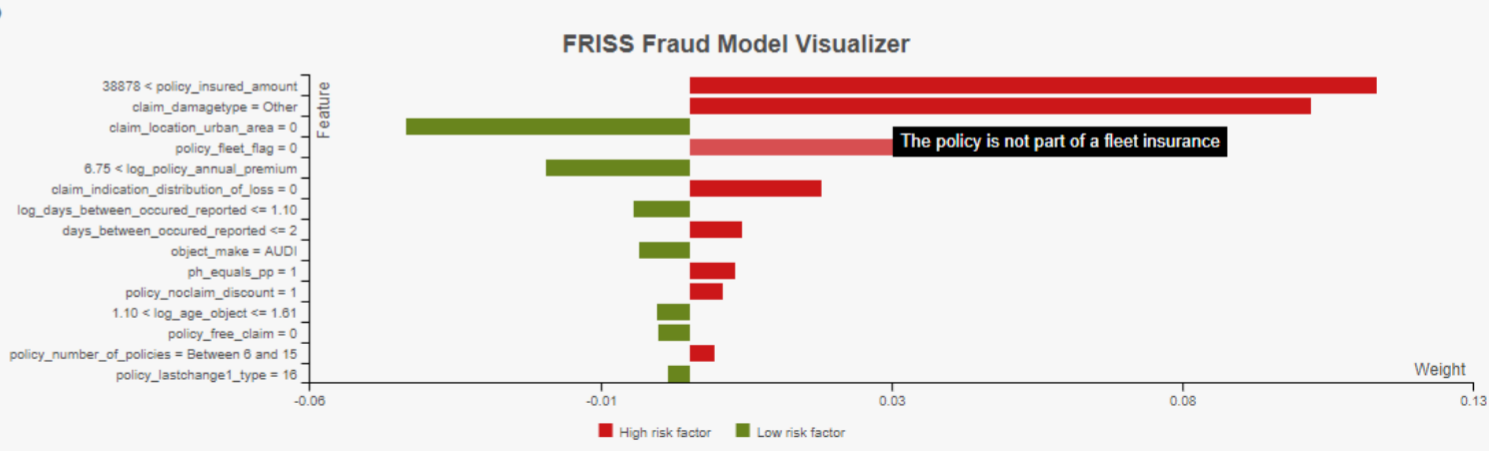
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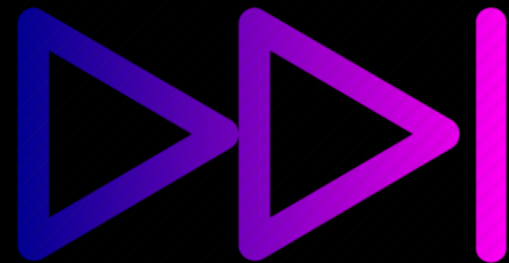
FRISS Fraud Model Visualizer

50 Claims The indicators in this category apply to the type of claim. For instance, if injuries were involved, or if there were abnormal damage causes, causetypes and other fraud relevant criterias.

50 fraudmodel_predictfraudcasco — Hit on Fraud Model

Interface_FrissOpenCPU







Thank you for your attention!

Gian Luigi Chiesa
Data Scientist @ FRISS

Herman Sontrop
PO & Sr. Data Scientist @ FRISS



Synthetic Exponential Data Amplifier (SEDA)

Generation of synthetic data for testing using an advanced deep learning technique

Data characteristics are preserved; highly correlated to real data and highly accurate model performance

Addresses the data scarcity issue; unlocks sophisticated AI models that need lots of data

Guaranteed privacy so no compliance issues



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