SAS Club 2020

Corona-Rückschau & “SAS Forecast”

Rainer Sternecker

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SAS Club 2020

Corona-~~Rückschau & “SAS Forecast”~~ Ongoing

Rainer Sternecker

DACH Cloud & Innovation, Customer Advisory Manager

SAS & Corona

COVID-19 Task Force

Information	Research	Data Hub	Analytics Services	Use Cases
SAS COVID-19 Resource Hub mit Coronavirus-Dashboards, kostenlosen E-Learnings oder gratis E-Books	Unterstützung öffentlicher Hackathons und Research Projekte	Auswahl, Aufbereitung und Bereitstellung von relevanten Daten	Lösung von aktuellen analytischen Fragestellungen Einspringen in SAS Aufgaben bei Kunden Analytics Coaching	Kundenspezifische Dashboards Rapid Response Environments Branchen Use Cases

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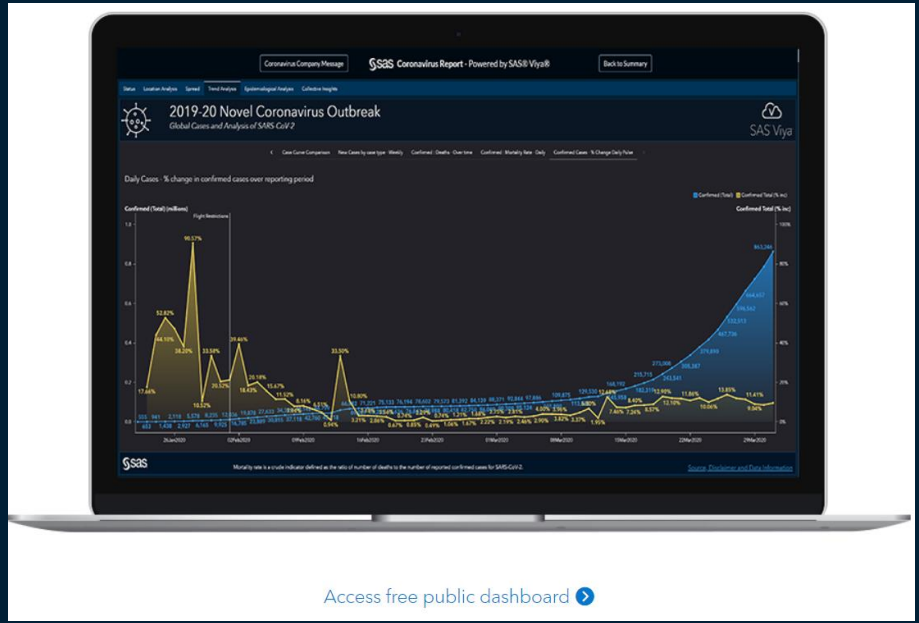
COVID-19 Task Force

Information

SAS COVID-19 Resource Hub mit Coronavirus-Dashboards, kostenlosen E-Learnings oder gratis E-Books



Link: [Corona-Dashboard]

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Information

SAS COVID-19 Resource Hub mit Coronavirus-Dashboards, kostenlosen E-Learnings oder gratis E-Books

Link: [Home Alone - Data Science Class with Gerhard Svolba]

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Research

Unterstützung öffentlicher Hackathons und Research Projekte

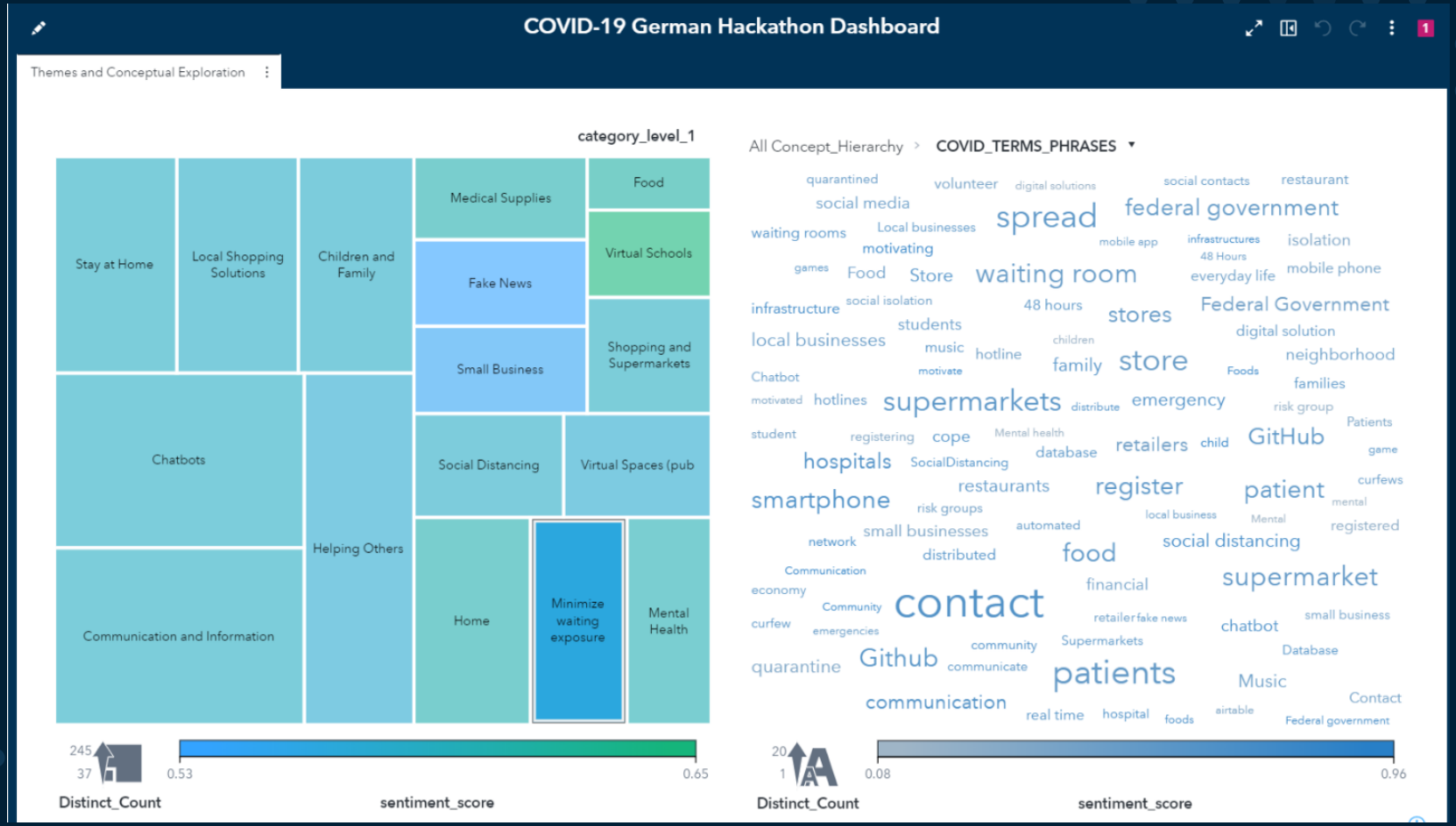
#WIRVSVIRUS
DER HACKATHON DER BUNDESREGIERUNG

The Johns Hopkins Center for Bioengineering Innovation & Design
COVID-19 Design Challenge
JHU DASHBOARD
Date: March 26 - 30
Location: Virtual

#HackCorona
An online hackathon for public protection from COVID-19 in Germany & worldwide
March 20th - onwards
BAYER
HACKING HEALTH
VISION HEALTH PIONEERS
MOTION LAB

kaggle
COVID-19 Global Hackathon

PANDEMIC RESPONSE HACKATHON
HACK COVID-19
CONVENED BY DATAVANT



Link: 27,000 coders vs. the coronavirus

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Analytics Services

Lösung von aktuellen analytischen Fragestellungen

Einspringen in SAS Aufgaben bei Kunden

Analytics Coaching

(1) Hilfe für den Betrieb Ihrer SAS Lösung

(2) Ask the expert - Hilfe durch Expertenratschläge

(3) Use Case Accelerator – Hilfe für neue Projekte

Link: www.sas.de/sashilft

Corona – SAS Use Case Accelerator

Link: Press-Release

Wo gibt es freie Intensivbetten mit Beatmungsgeräten für

Robert Koch-Institut und Fachgesellschaf
hochverfügbar

Robert Koch-Insti

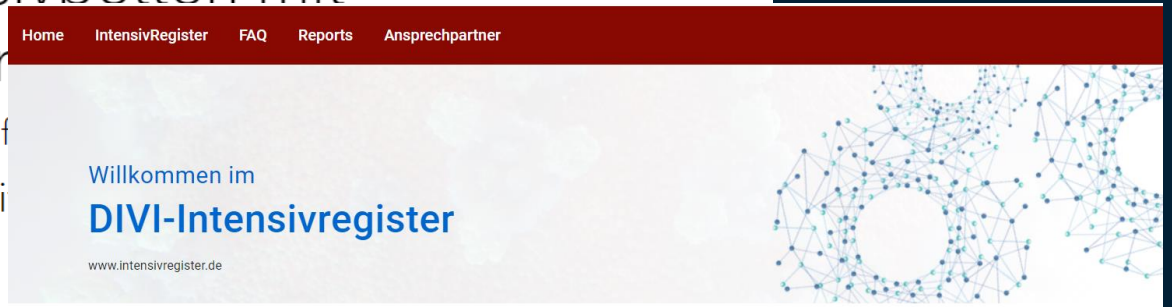
Heidelberg, (07. Apr
Das Robert Koch-Ins
haben gemeinsam n
Bedarf an freien Inte
Lösungen, hat diese

18

Tage von Projektstart bis zum Go Live

1.300

meldende Kliniken



Unser Auftrag

Täglich erfasst das DIVI-Intensivregister die freien und belegten Behandlungskapazitäten in der Intensivmedizin von etwa 1.300 Akut-Krankenhäusern in De
2-Pandemie werden zudem auch aktuelle Fallzahlen intensivmedizinisch behandelter COVID-19 PatientInnen aufgezeichnet.
Das Register ermöglicht in der Pandemie, und darüber hinaus, Engpässe in der intensivmedizinischen Versorgung im regionalen und zeitlichen Vergleich
Intensivregister eine wertvolle Grundlage zur Reaktion und zur datengestützten Handlungssteuerung in Echtzeit seit April 2020.

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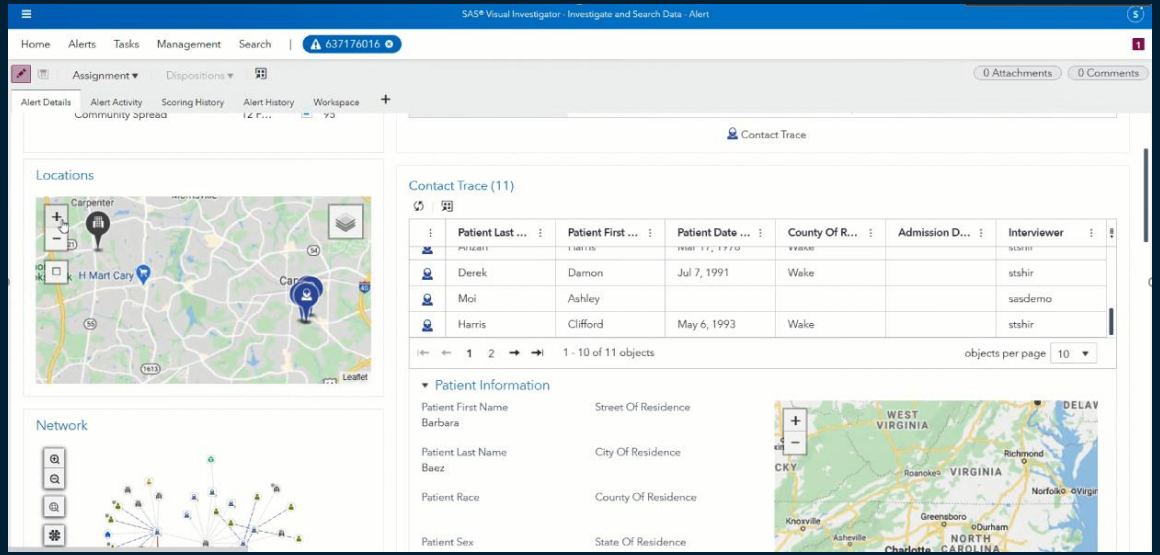
Use Cases

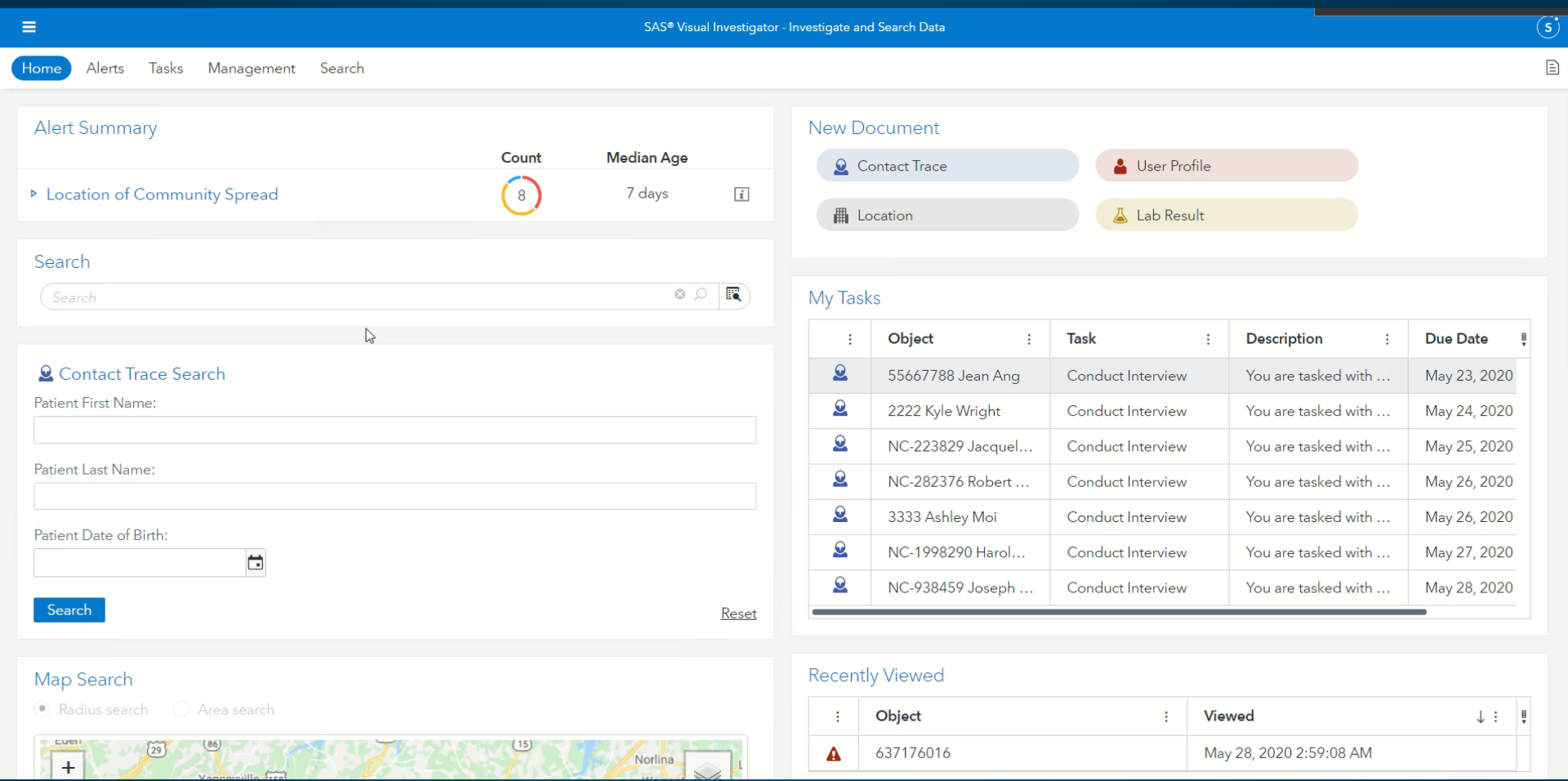
Kundenspezifische Dashboards

Rapid Response Environments

Branchen Use Cases



Contact Tracing mit SAS Visual Investigator



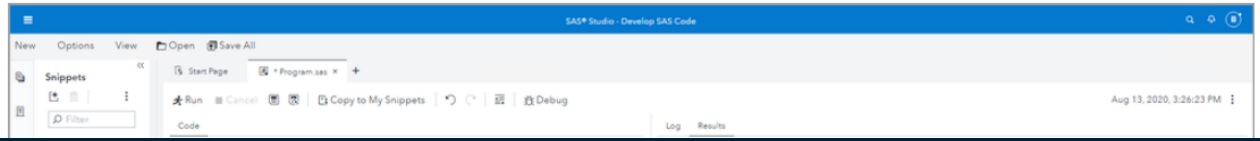
SAS Blogs

Link: Sensitivity & Specificity in Disease Testing: Statistical Concepts in the Time of Coronavirus

CAUTION: Although PROC FREQTAB in SAS Viya provides capabilities similar to the capabilities of PROC FREQ in SAS 9 SAS/STAT software, do not use PROC FREQTAB on Viya to calculate these biostatistical measures. ORDER = DATA is not an option in PROC FREQTAB because in a distributed environment like Viya, the data are divided onto different nodes and threads. Therefore, if your positives are 1s and your negatives are 0s, the default ordering of the table will make your sensitivity, specificity, PPV and NPV incorrect. You could fix this by making your positives 0s and your negatives 1s, but that could be somewhat confusing and counterintuitive.

Table 5.1: Comparison of PROC FREQTAB and PROC FREQ

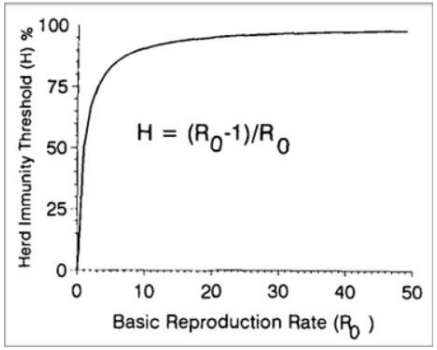
Feature	PROC FREQTAB	PROC FREQ
Provides statistical analysis of frequency and crosstabulation tables	Yes	Yes
Provides OUT=, OUTPUT, and ODS output data sets	Yes	Yes
Threading	Tabulation designed for CAS; executes on multiple threads	Executes on a single thread
Supports MISSING option	In PROC FREQTAB statement	In TABLES statements
Supports SPARSE option	No	Yes
Supports CHISQ(TESTP=*SAS-data-set*)	No	Yes



SAS Blogs

Link: [SAS Helps You Understand Disease Spread: Biostat Concepts in the Time of Coronavirus]

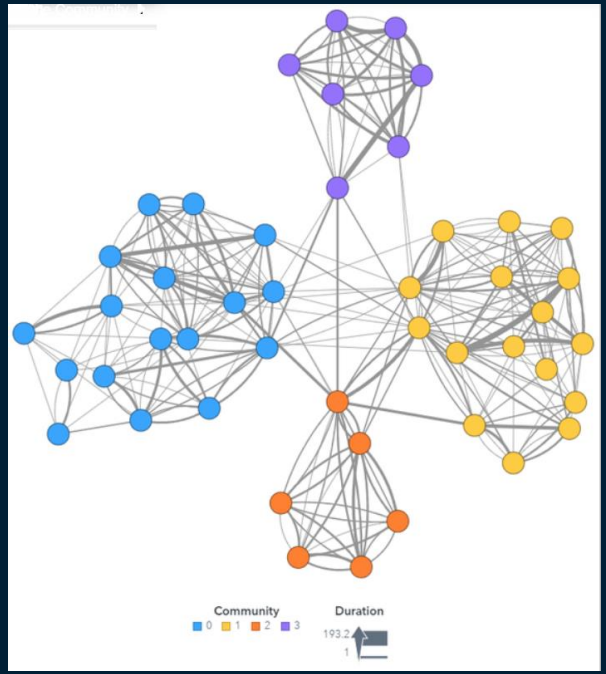
Graphed, this would look like:



Using this formula, and the R_0s in the table up above, we can estimate Herd Immunity Thresholds.

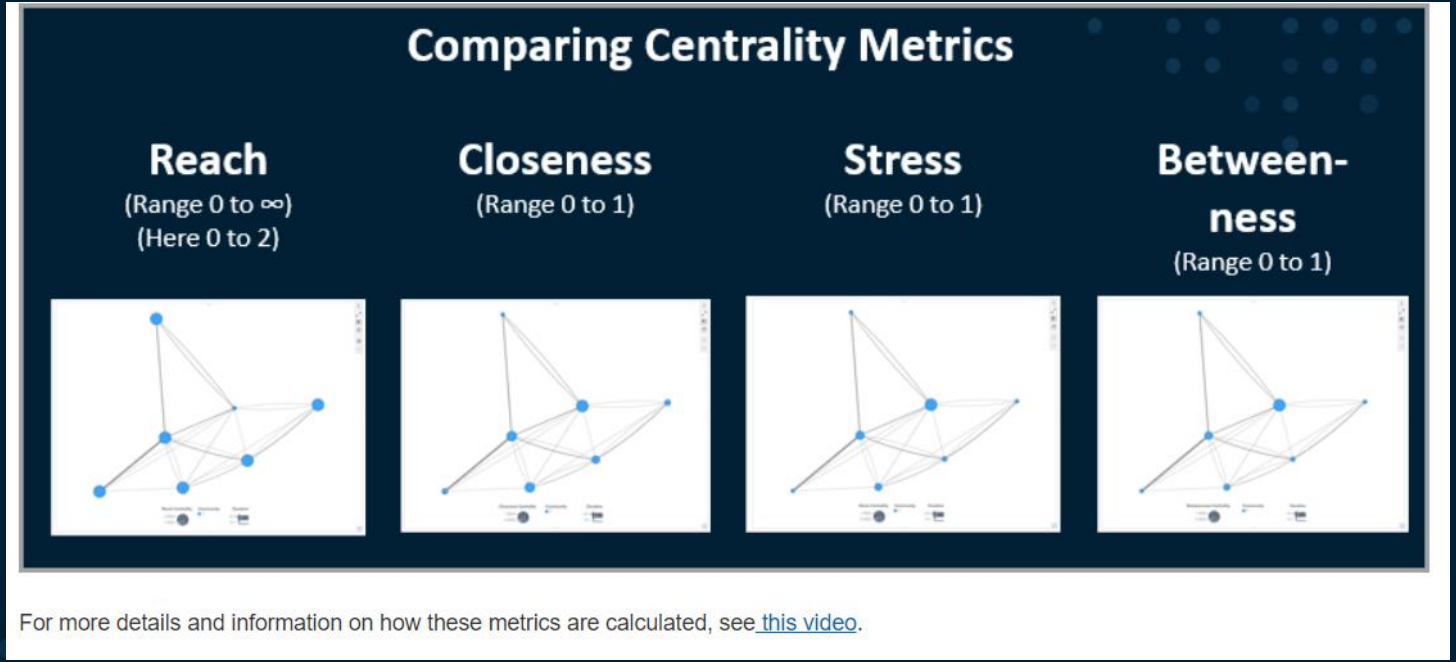
ESTIMATES of R_0 and Herd Immunity Threshold

DISEASE	R_0	Herd Immunity Threshold
Bubonic Plague	1.4-1.8	29-44%
Ebola	1.3-4.7	23-79%
Influenza	1-2	0-50%



SAS Blogs

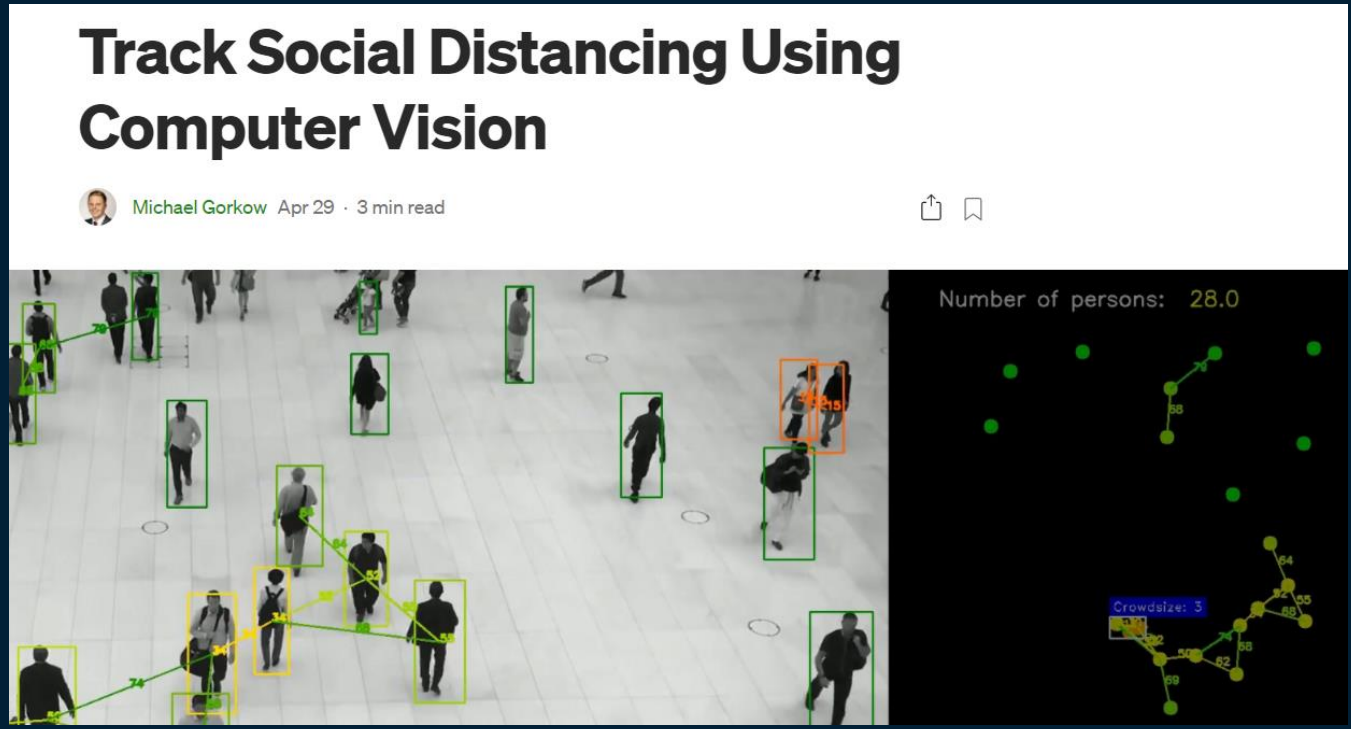
Link: Network Analysis in SAS Visual Analytics: Biostats in the Time of Coronavirus



SAS Blogs

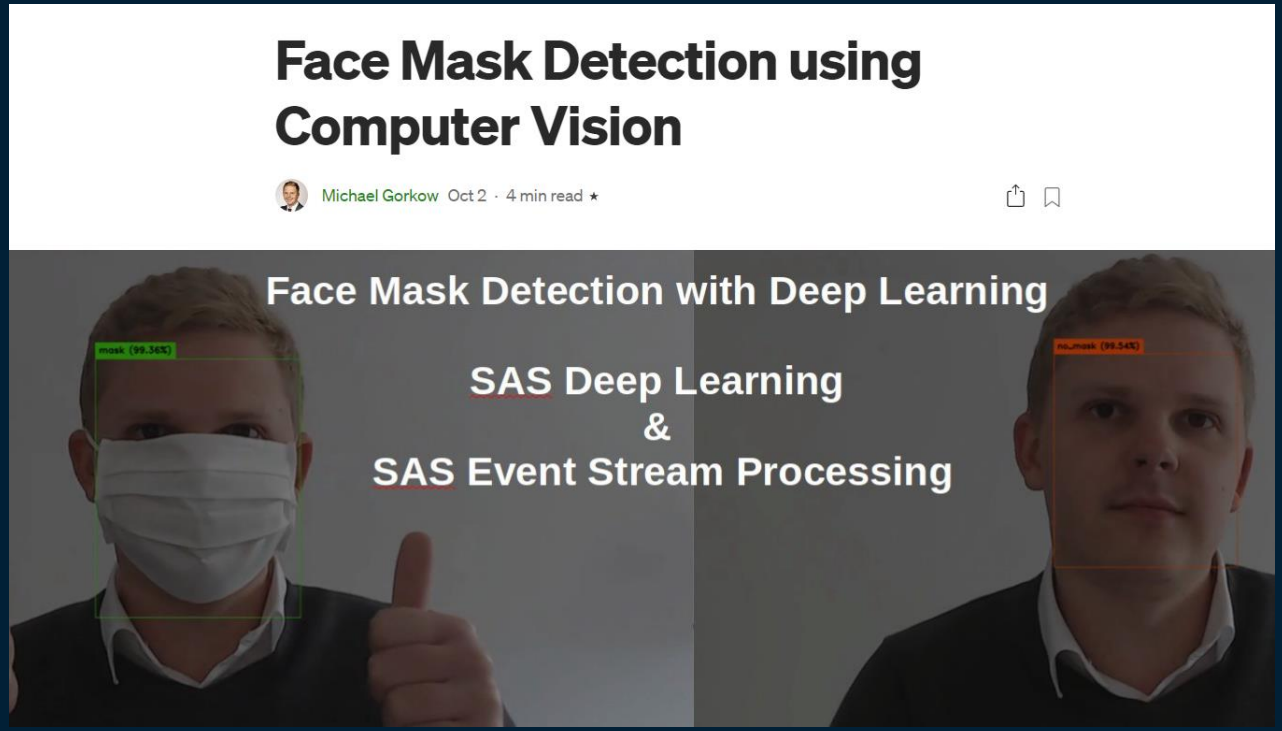
Link: [Track Social Distancing Using Computer Vision]

Track Social Distancing Using Computer Vision



SAS Blogs

Link: [Face Mask Detection using Computer Vision]



Vielen Dank!

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