DSC 207 - PYTHON FOR DATA SCIENCE

# DATA SCIENCE IN EVERYDAY LIFE

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## By the end of this video, you will be able to:

- Recite examples of data science in everyday life
- Describe how data science benefits businesses for better decision-making and risk mitigation
- Recognize societal-scale applications of data science

## Data Science in Everyday Life

- Finance
- Healthcare
- Entertainment
- Travel
- Shopping
- •••



**Smart Cities** 



Smart Grid and Energy Management



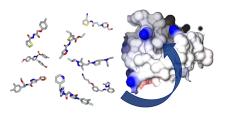
Data-Driven Marketing



Disaster Resilience and Response



Personalized Precision Medicine

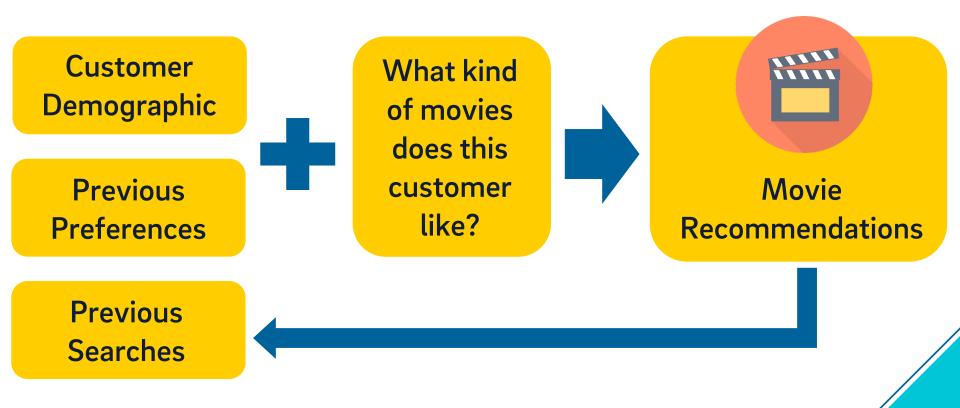


Computer-Aided Drug Discovery



Smart Manufacturing

## **Entertainment Industry: Movie Recommendations**



## **PREDICTION**

**ACTION** 

What kind of movies do customers like?

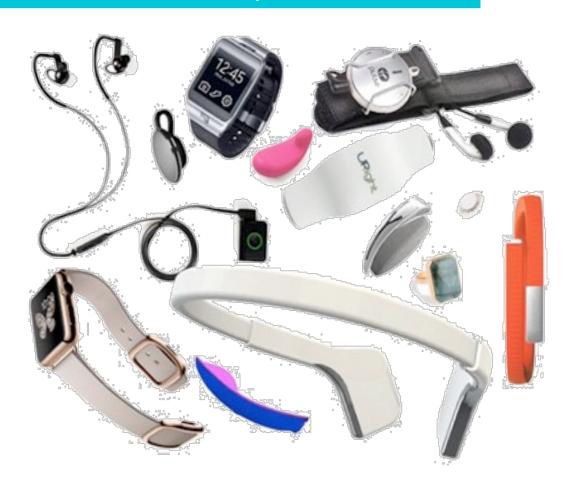


What movies to produce and market?

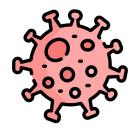




## **Entertainment Industry: Smart Healthcare**



## Safety: Data Science for Emergency Management







Recovery





Response

Mitigation



#### Data Science Impact to Fight COVID-19











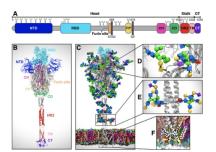




- Disease data
- Virus models
- Wearables
- Public health surveys
- Social media
- Contact data



- Spread modeling
- Understanding the virus
- Drug design
- Vaccine development
- Economical impact
- Mental health





https://phys.org/news/2020-06-respiratory-dropletmotion-evaporation-covid-type.html

- Decisionsupport
- Policy making
- Vaccine
- Treatment
- Cure

https://www.tacc.utexas.edu/-/sugar-coatinglocks-and-loads-coronavirus-for-infection