

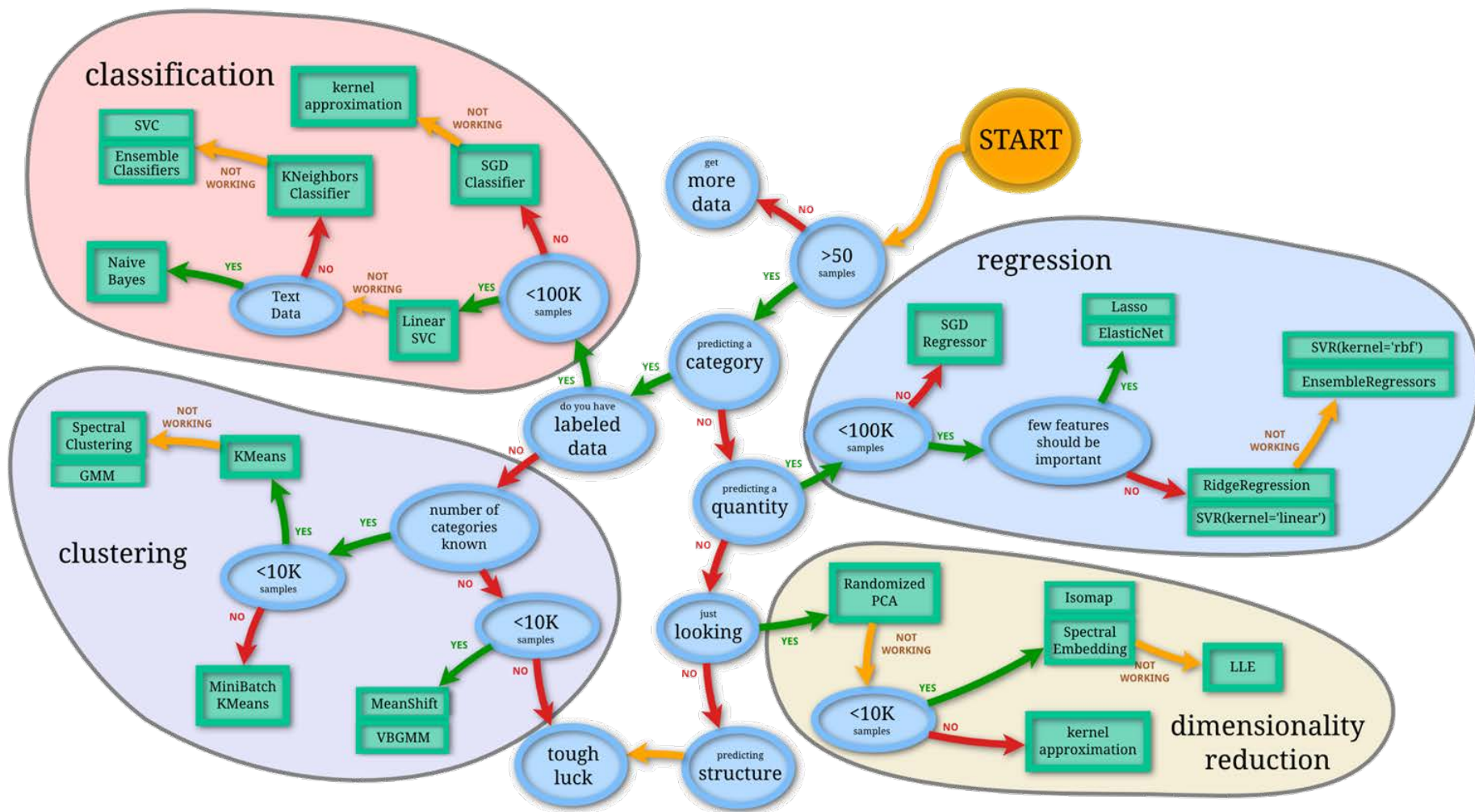
MACHINE LEARNING WITH PYTHON

Themistoklis Diamantopoulos

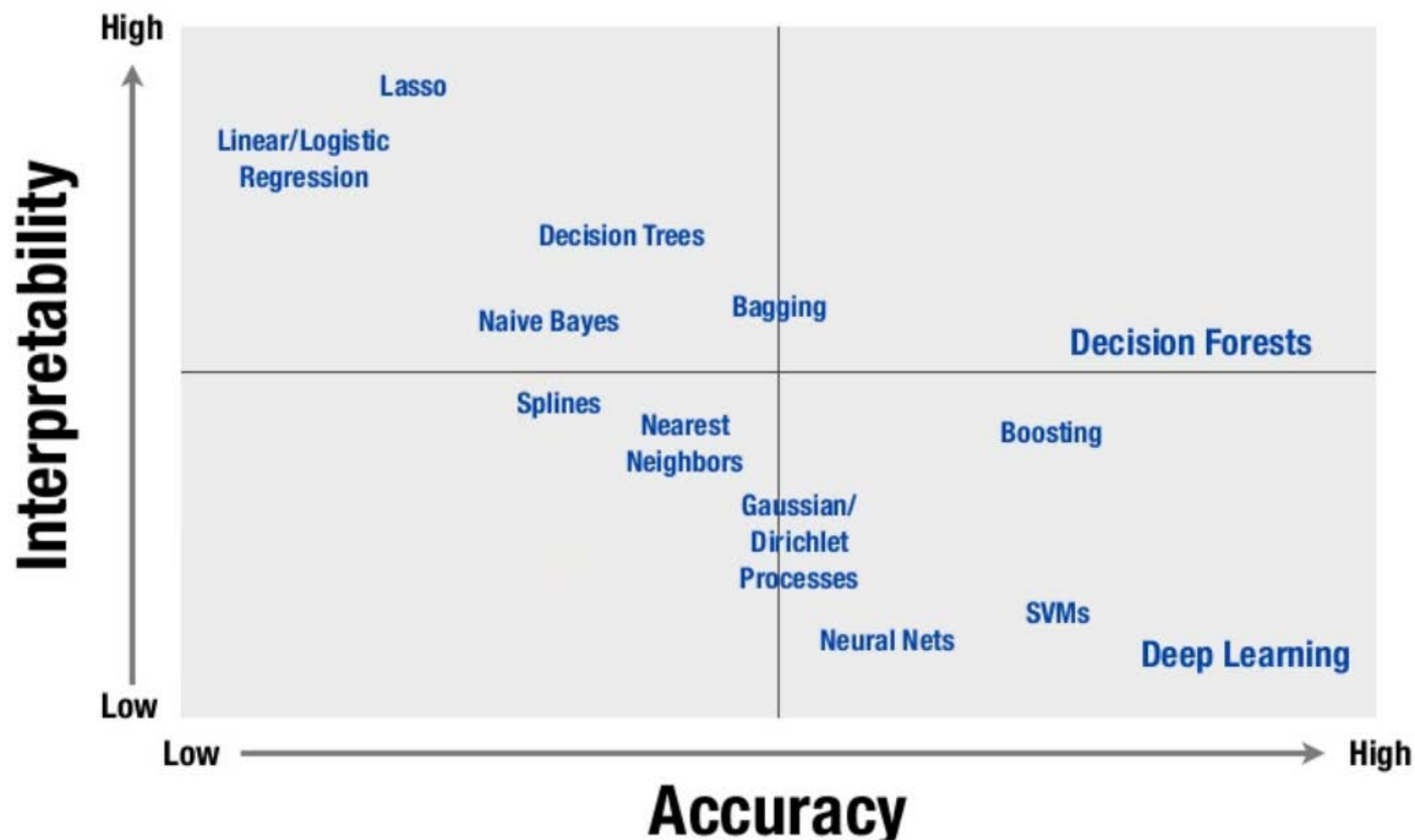
What have we learned?

- What is Machine Learning?
- What are the main types of algorithms?
- How can I train a model?
- Problems outlined:
 - Classification
 - Regression
 - Feature Selection
 - Feature Extraction
 - Clustering

Choose a Machine Learning Algorithm



Machine Learning Algorithmic Trade-Off



Who uses Machine Learning

CORE TECHNOLOGIES

ARTIFICIAL INTELLIGENCE

IBM WATSON
Numenta
Cycers
Reactor
MetaMind
ai-one
Research
SI

DEEP LEARNING

vicarious
facebook
GOOGLE
SKYMIND
Vision
Factory
Baidu
ersolz
SignalSense

MACHINE LEARNING

rapidminer
context
datawo
DATAFORMA
LiftLogic
Azure ML
CrashLab
Alere
iQ
DATAFORMA
sense2vec
Lulasa
Sense
Socran

NLP PLATFORMS

Corticalio
LUMINOSSO
MobiLab
idibon
wit.ai

PREDICTIVE APIS

AlchemyAPI
Google
PredictionIO
MINDOPS
big
ALGORITHMIA
Expect
Labs

IMAGE RECOGNITION

clarifai
MADBITS
DMNresearch
VISEZE
lookflow

SPEECH RECOGNITION

GRIDSPACE
popUP
archive
NUANCE

RETHINKING ENTERPRISE

SALES

Predict
RelateIQ
CLARIFAI
infer
AVISIO
NG-RDATA
FRAMED
causita

SECURITY / AUTHENTICATION

CROSSMATCH
CYLANCE
c-njur
BITSIGHT
biarym

FRAUD DETECTION

sift science
ThreatMetrix
Brighthouse
secure
feedzai
veratim

HR / RECRUITING

TalentBin
predikt
gold
hiQ
connectif
connectif

MARKETING

brightfunnel
CommandIQ
RADIUS
Tel-part
bloomreach
AIRPR
people
pattern

PERSONAL ASSISTANT

Siri
Cortana
tempo
KASISTO
Google now
cleversense
Rebinlabs
fuse:machines
CLARA LABS
VIV

INTELLIGENCE TOOLS

ADATAQ
Palantir
Quid
FirstRain
Digital
Researching

RETHINKING INDUSTRIES

ADTECH

METAMARKETS
rocketfuel
ADBRAIN
dstillery
YieldMo

AGRICULTURE

BLUE RIVER
cereasimaging
THE CLIMATE CORPORATION
tule

EDUCATION

declara
coursera
KNEWTON
kidaptive

FINANCE

Bloomberg
alphasense
Dataminr
KENSHC
minotabrook
BINATIX

LEGAL

Lex Machina
COUNSELYTICS
JUDICATA
brightleaf
RAVEL
Brevia
Diligenttagline

MANUFACTURING

SIGHT MACHINE
MICROSCAN
IVISYS

MEDICAL

Parzival
Genascent
genusand lab
transcripTIC
ZEPHYR
bino
TUTE

OIL AND GAS

kaggle
TACHYUS
flura
AYASDI
bieta

MEDIA / CONTENT

outbrain
SAILTHRU
Prismatic
newstle
wovii
ARRIA
Dive
Sensity

CONSUMER FINANCE

affirm
BILL GUARD
LendUp
Kabbage
Venture
LendingClub

PHILANTHROPIES

DataKind
thorn
DATA GUILD

AUTOMOTIVE

Google
T
@linestats
CRUISE

DIAGNOSTICS

enitic
lumiat
3SCAN
lumiat

RETAIL

BAY SENSORS
PRISM SKYLABS
celect
euclid

RETHINKING HUMANS / HCI

AUGMENTED REALITY

APX
blippar
HICTP
layor

GESTURAL COMPUTING

THALMICLABS
eyeSight
GestureLink
omek
LEAP
Gear
nod

ROBOTICS

intel
iRobot
Jibo
ONKI
LEGO mindstorms
SulBak

EMOTIONAL RECOGNITION

affectiva
EMOTION
beyondverbal
cogito

SUPPORTING TECHNOLOGIES

HARDWARE

NVIDIA
XILINX
QUALCOMM
rigetti

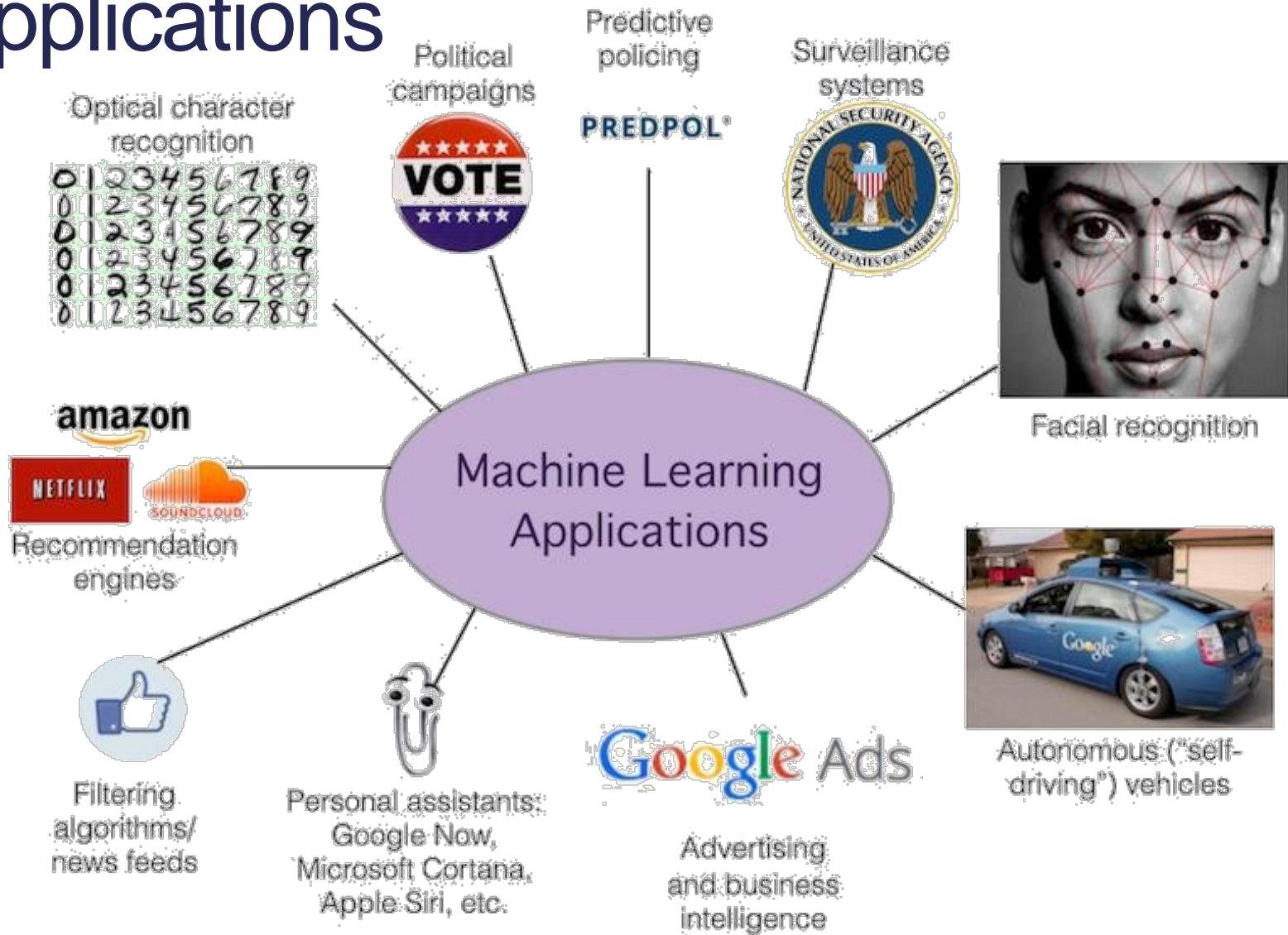
DATA PREP

TRIFACTA
tamr
Paxata
Alation

DATA COLLECTION

diffbot
CrowdFlower
WorkFusion
kimono
Cinnabot
import

Applications



So, what next?

Now you know!

Use your power for good!