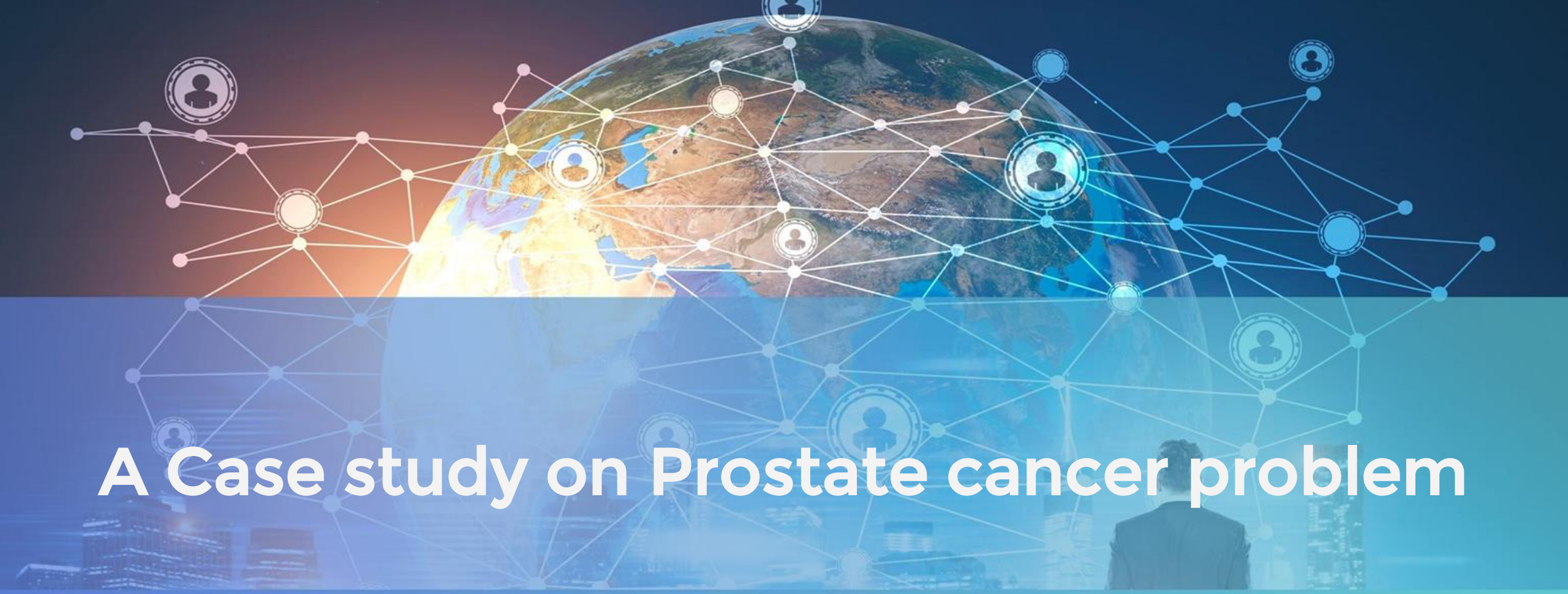

A Case study on Prostate cancer problem

GITAA
Transforming careers

Prostate cancer data

- The data for this example come from a study by Stameyet al. (1989).
- They examined the correlation between the level of prostate-specific antigen (psa) and a number of clinical measures in men who were about to receive a radical prostatectomy.

Data Description

Total size : 97 x 9 ***Data file : prostate.txt***

Variables	Description
lcavol	log cancer volume
lweight	log prostate weight
age	age
lbph	log of the amount of benign prostatic hyperplasia
svi	Seminal vesicle invasion
lcp	log of capsular penetration
gleason	Gleason score
pgg45	Percent of gleason scores 4 or 5
lpsa	log of prostate specific antigen

Prostate cancer data

- Both lcavol and lcp show a strong relationship with the response lpsa, and with each other
- We need to fit the effects jointly to untangle the relationships between the predictors and the response
- Apply the dimensionality reduction technique with an explained variance of 0.95 using Principal Component Analysis (PCA) and build the PCR model


operation == "MIRROR_X":
irror_mod.use_x = True
irror_mod.use_y = False
irror_mod.use_z = False
operation == "MIRROR_Y":
irror_mod.use_x = False
irror_mod.use_y = True
irror_mod.use_z = False
operation == "MIRROR_Z":
irror_mod.use_x = False
irror_mod.use_y = False
irror_mod.use_z = True
selection at the end -add
_ob.select= 1
er_ob.select=1
ntext.scene.objects.acti
("Selected" + str(modifier
irror_ob.select = 0
bpy.context.selected_ob
ata.objects[one.name].se
int("please select exact

THANK YOU