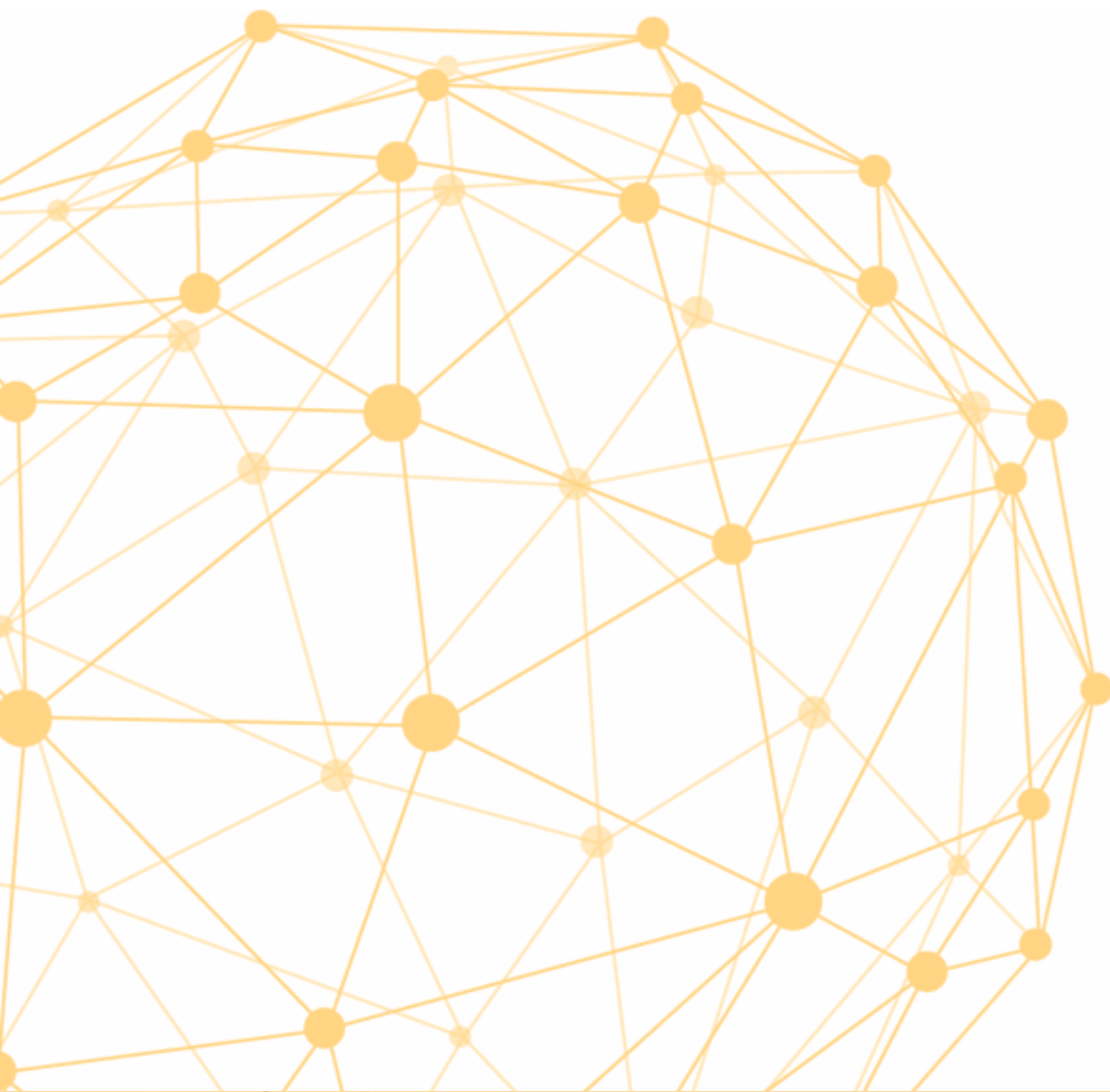
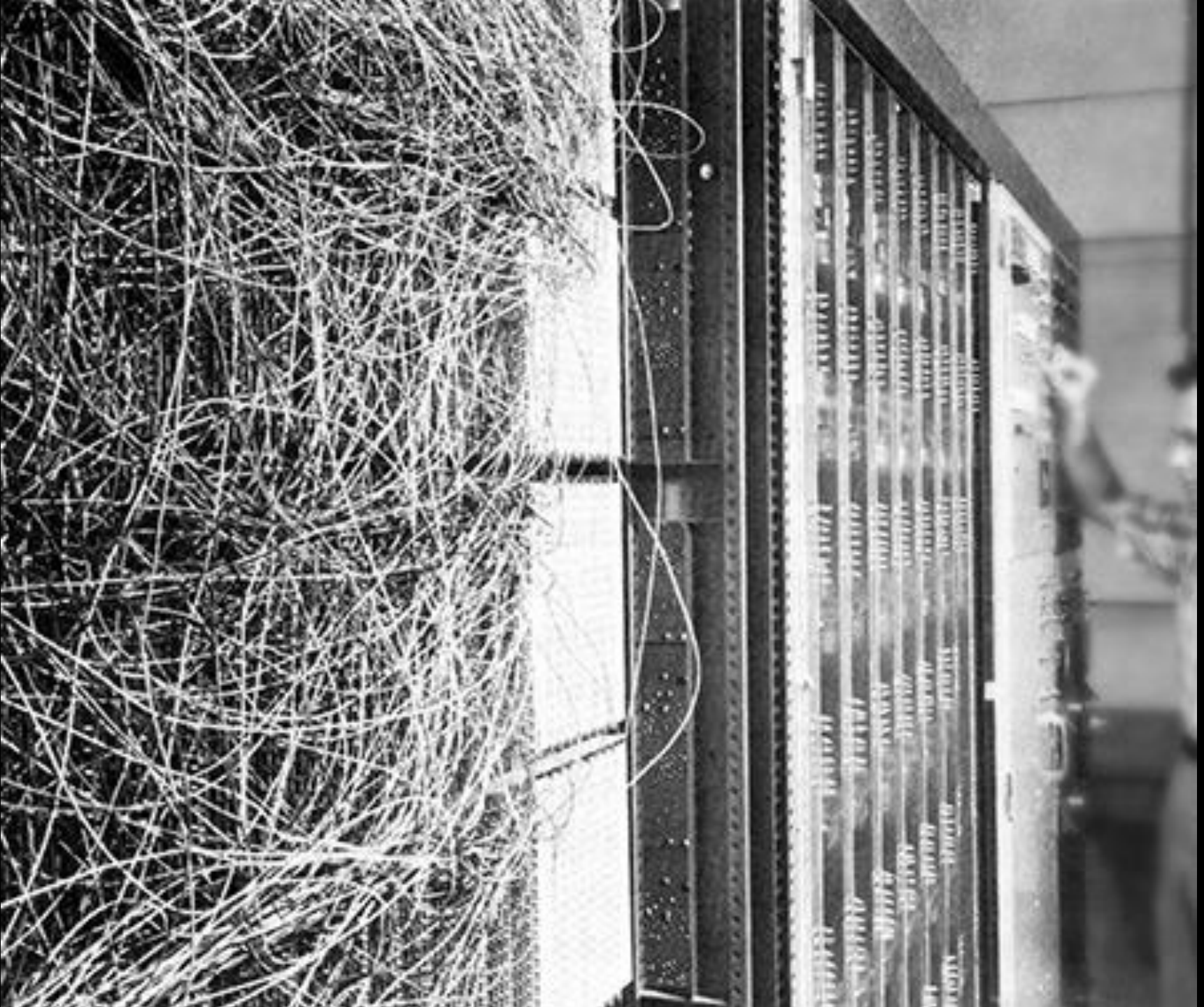




Sannheten om kunstig intelligens i helse

Smart Care Cluster 2019

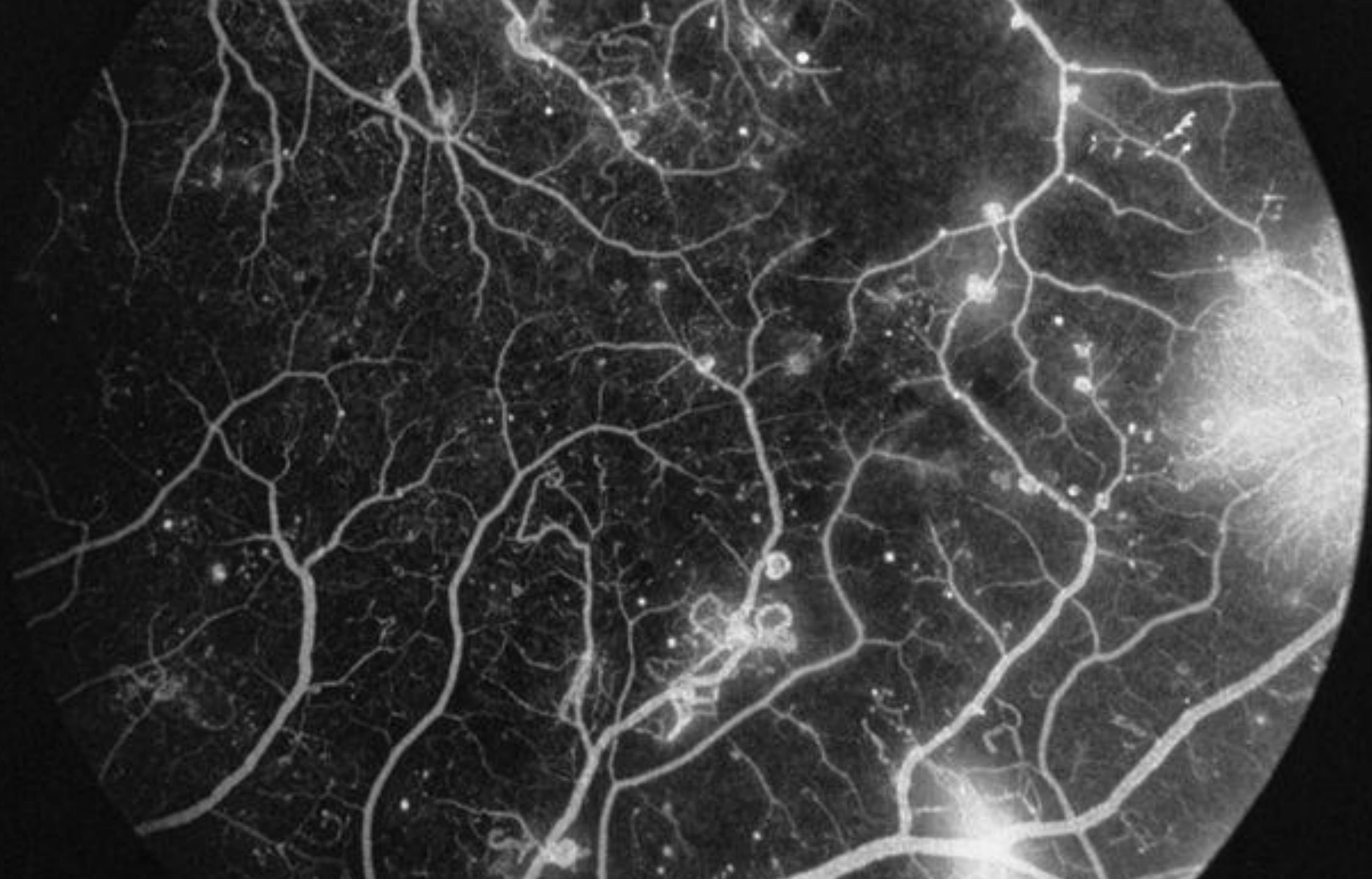














I am not really confident, but I think it's a man sitting next to a table holding a newspaper and he seems happy.



I am not really confident, but I think it's a man taking a selfie in a dark room and he seems very happy.



original



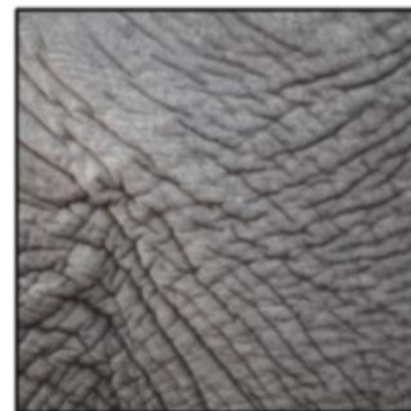
greyscale



silhouette



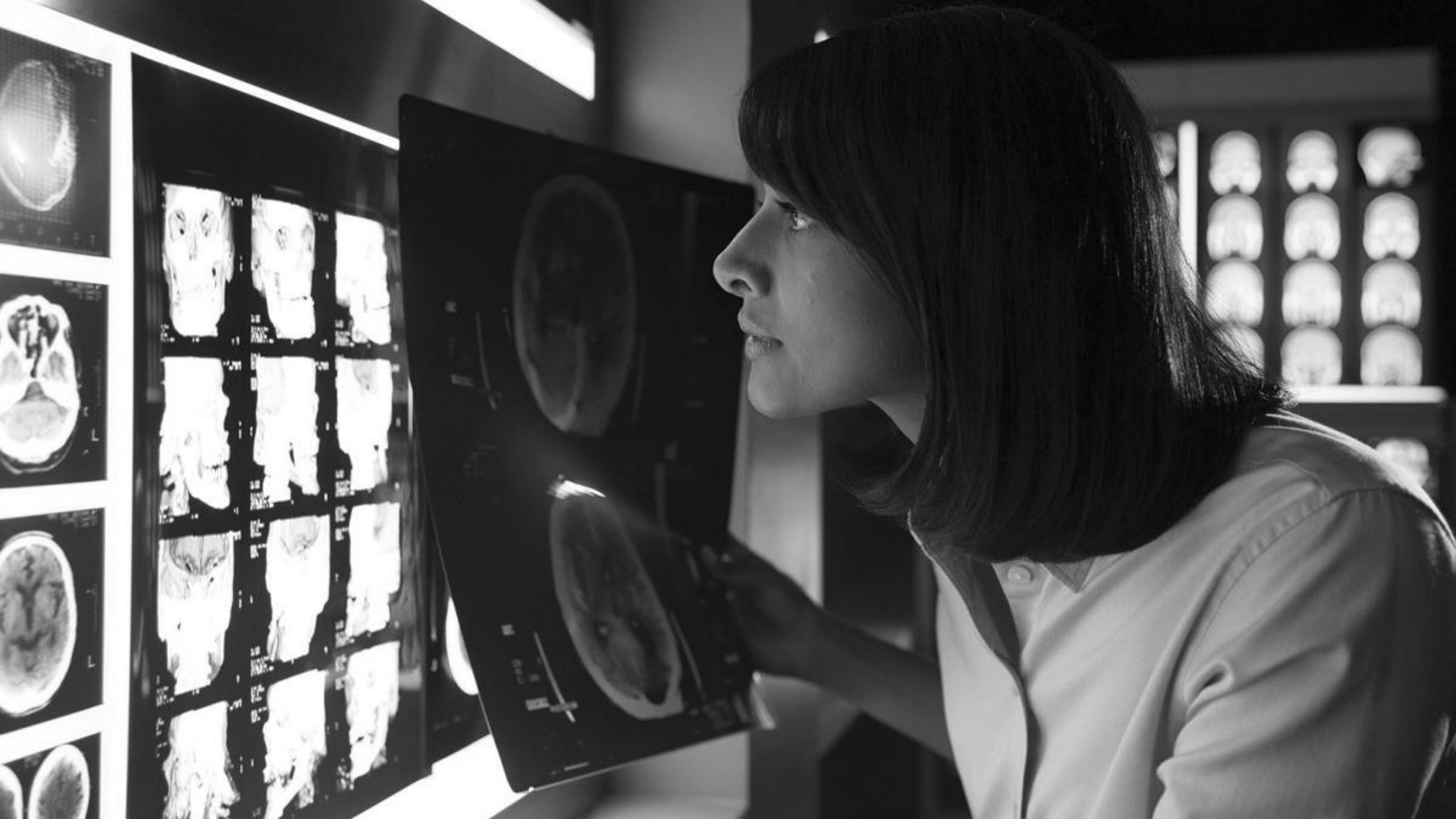
edges



texture









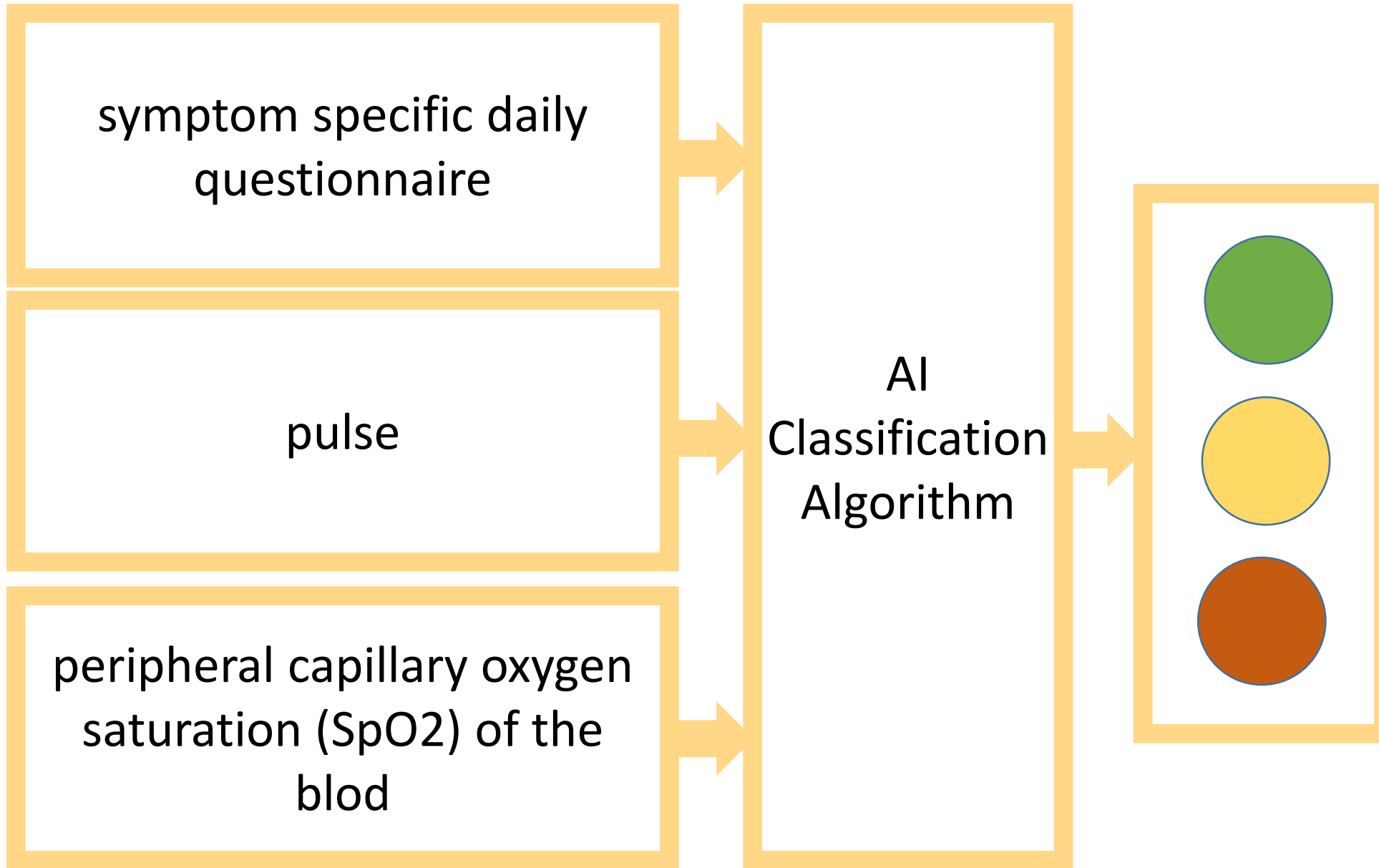








Non-intrusive surveillance

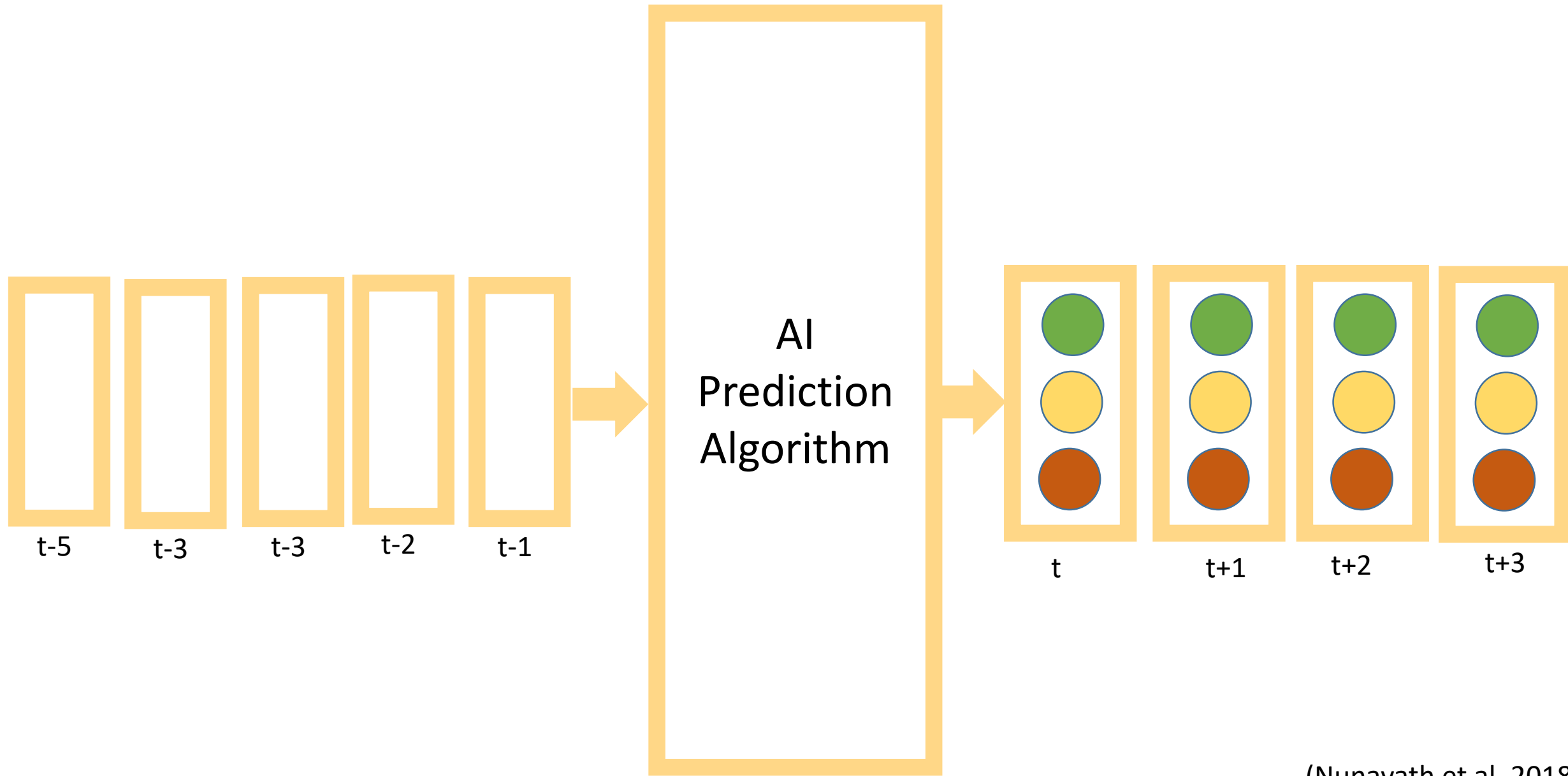


(Nunavath et al. 2018)



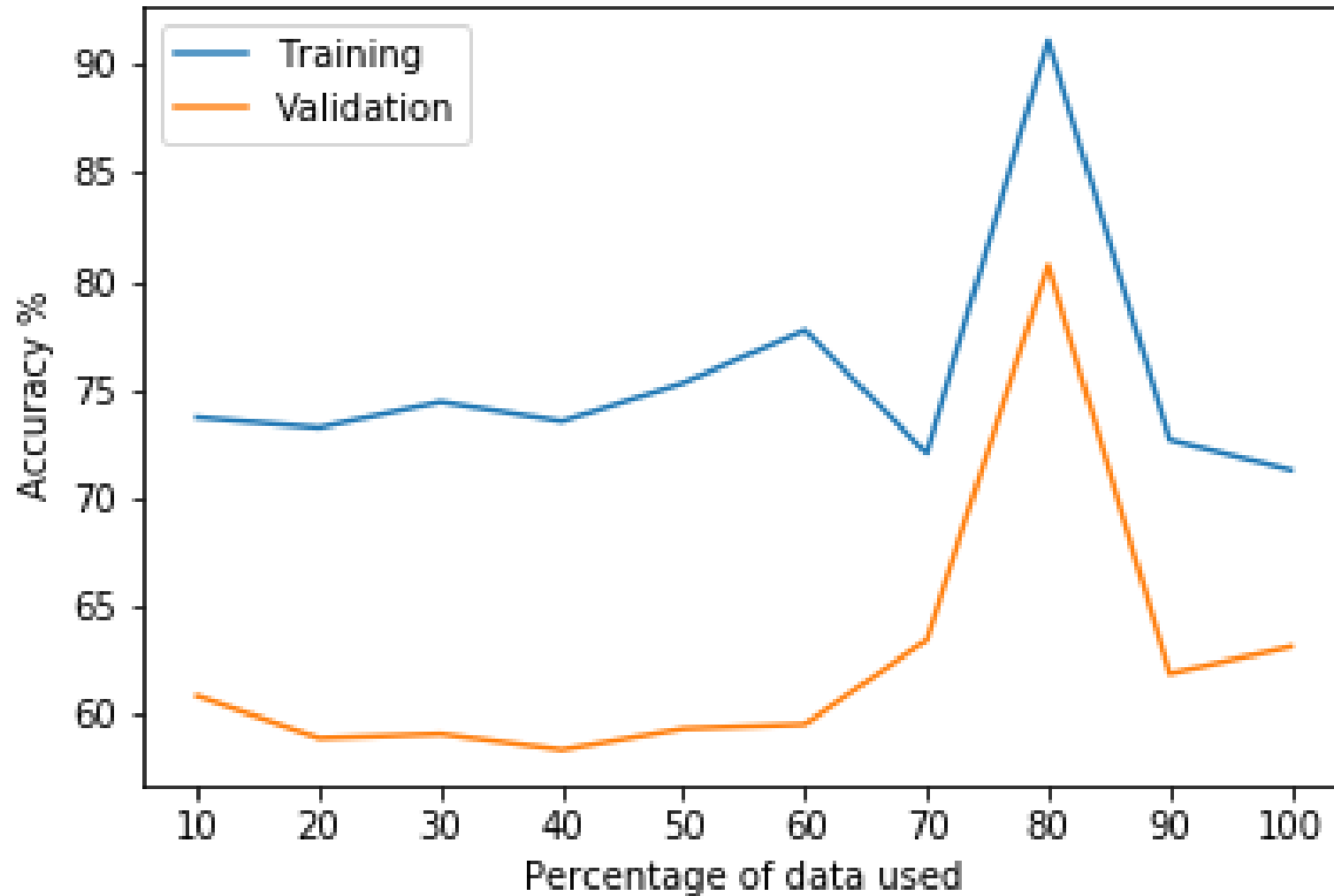
92.86%

(Nunavath et al. 2018)



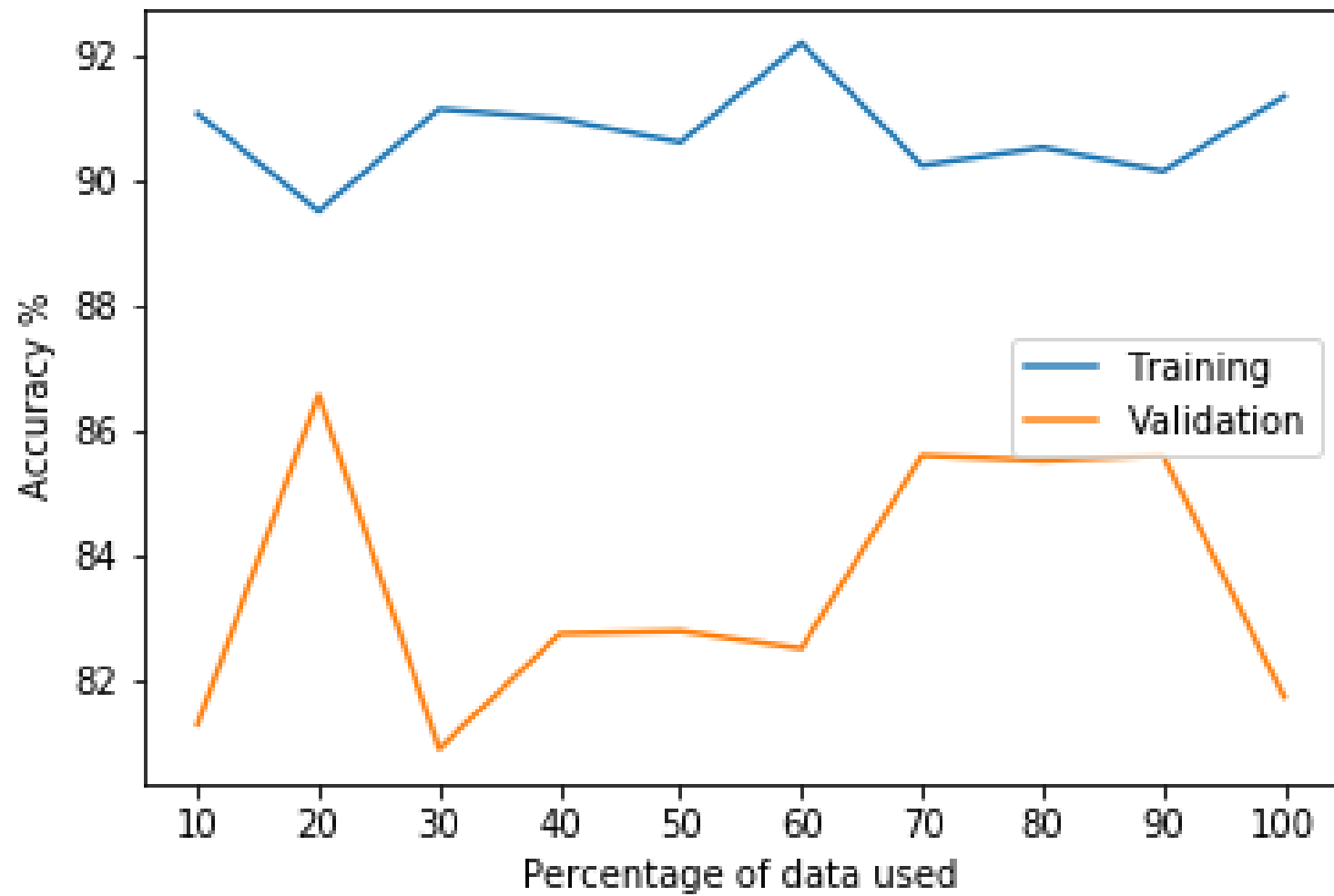
(Nunavath et al. 2018)

t+3 prediction



(Nunavath et al. 2018)

t+3 prediction – yellow removed



(Nunavath et al. 2018)



$t+1$: 84%

$(t+1)$ or $(t+2)$: 88%

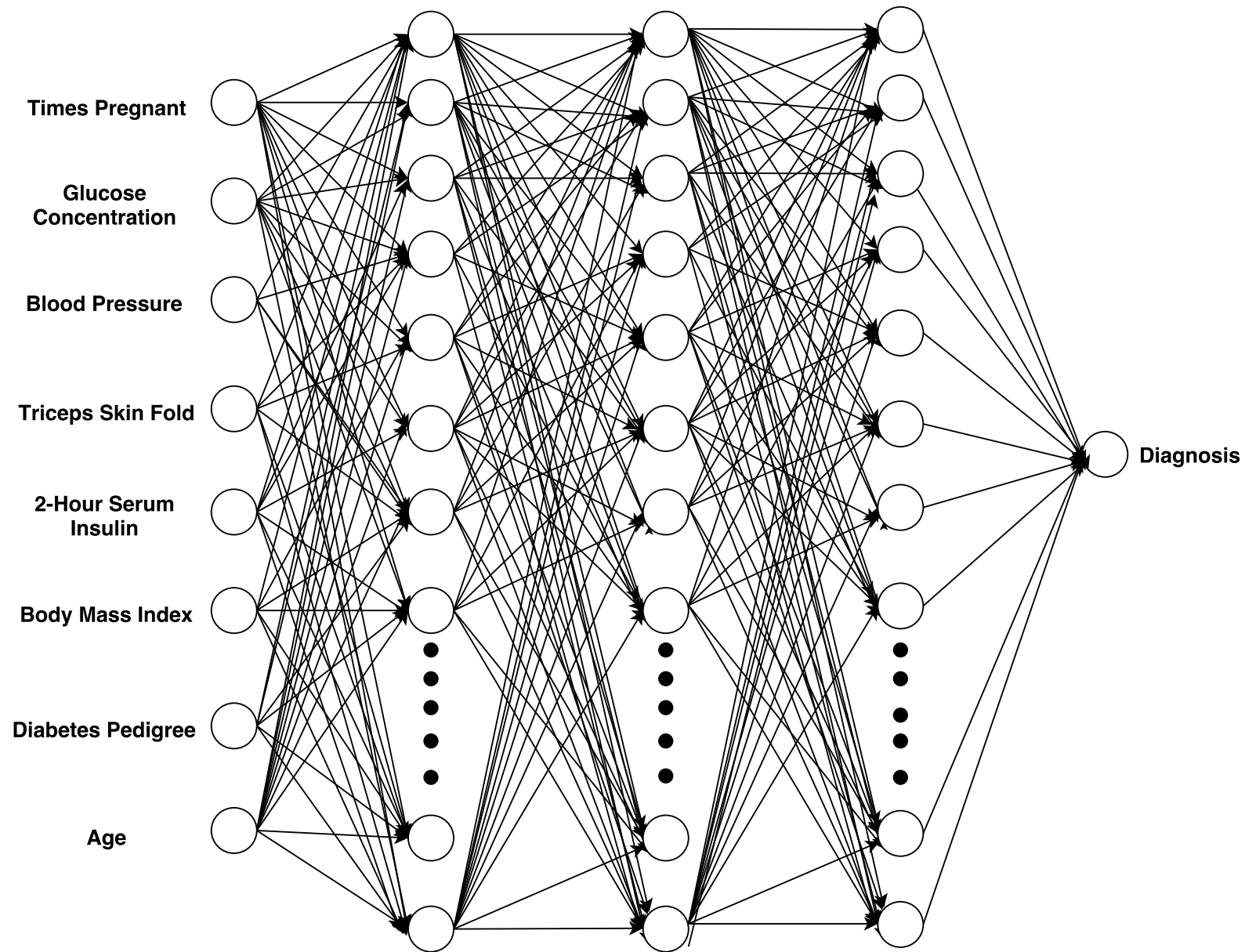
$(t+1)$ or $(t+2)$ or $(t+3)$: 88%

(Nunavath et al. 2018)

Diabetics

- Pima Indian Dataset
- UCLA



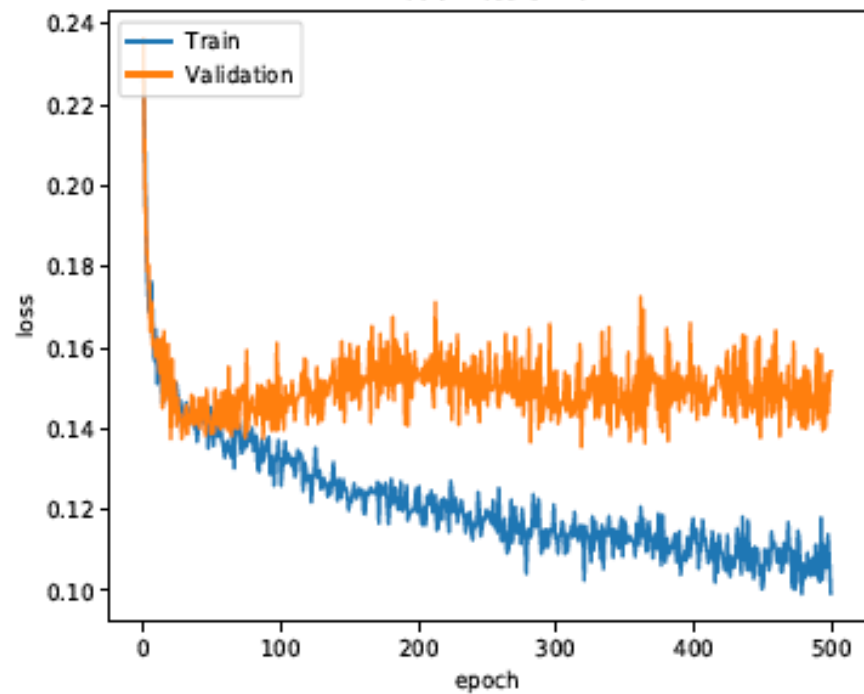


(Dutt et al. 2018)

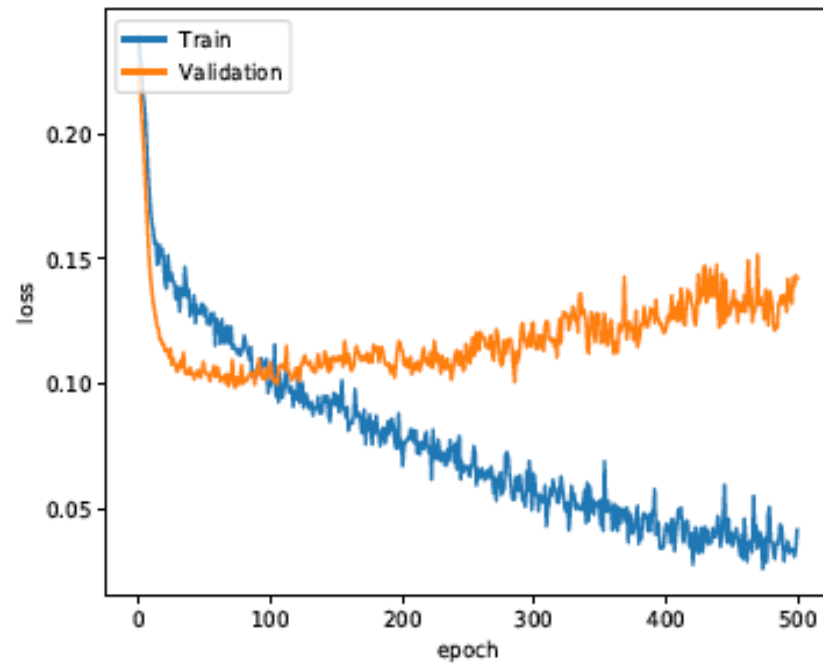
	ELU	SELU	Leaky ReLU	ReLU
Training Accuracy (%)	83.91	87.11	92.63	98.98
Testing Accuracy (%)	<u>82.50</u>	82.05	81.15	78.73

(Dutt et al. 2018)

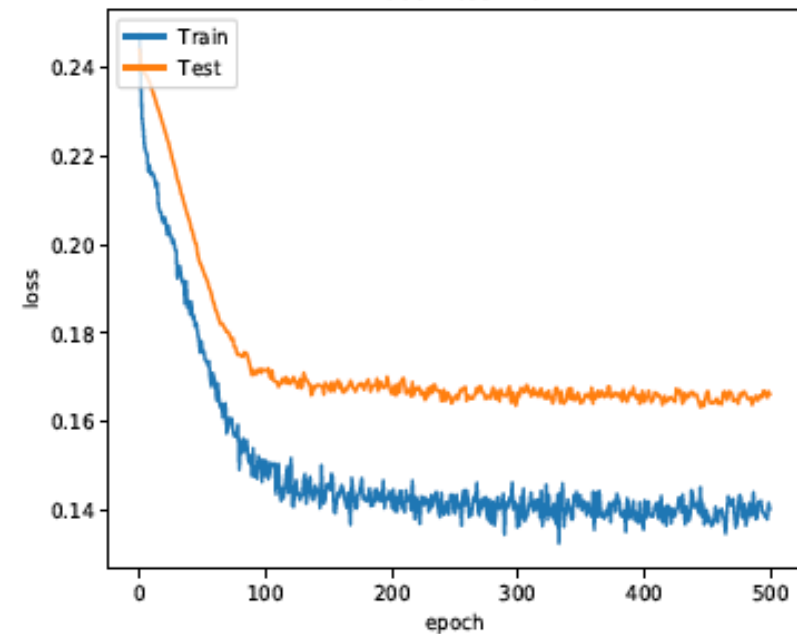
Model Loss SELU



Model Loss ReLU



Model Loss ELU



(Dutt et al. 2018)



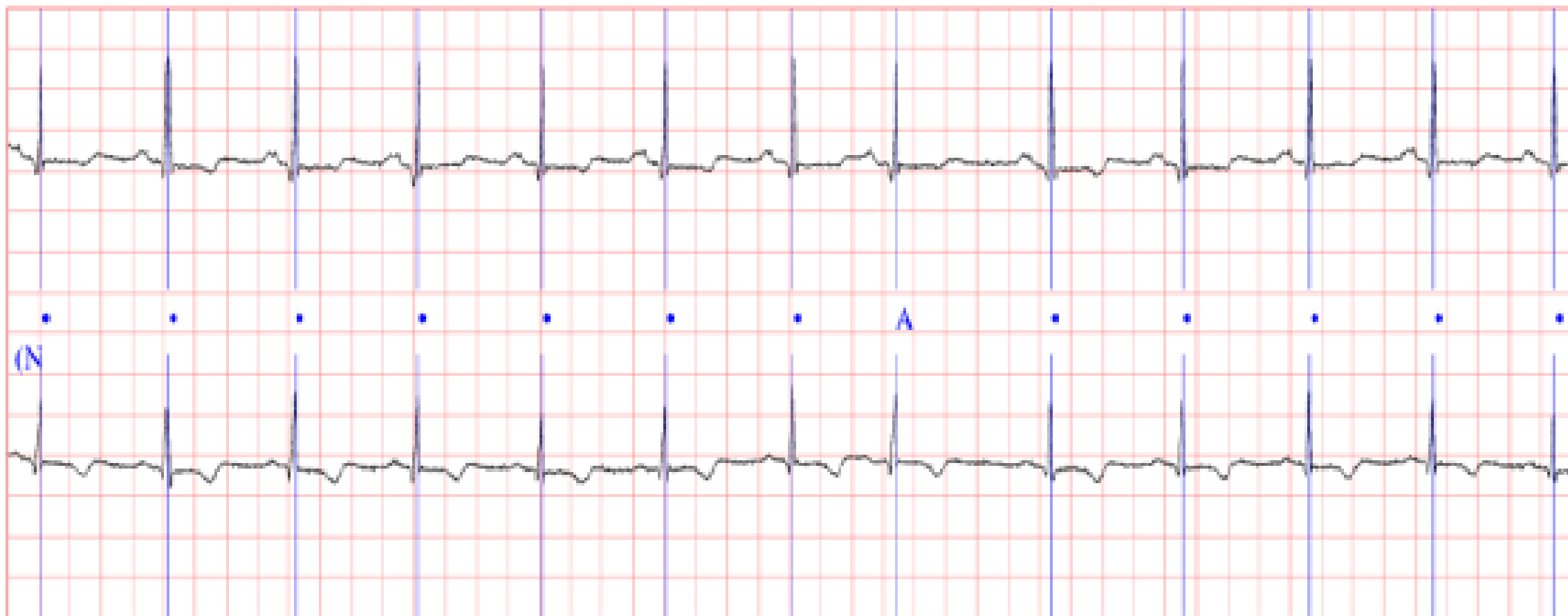
82.50%

(Dutt et al. 2018)

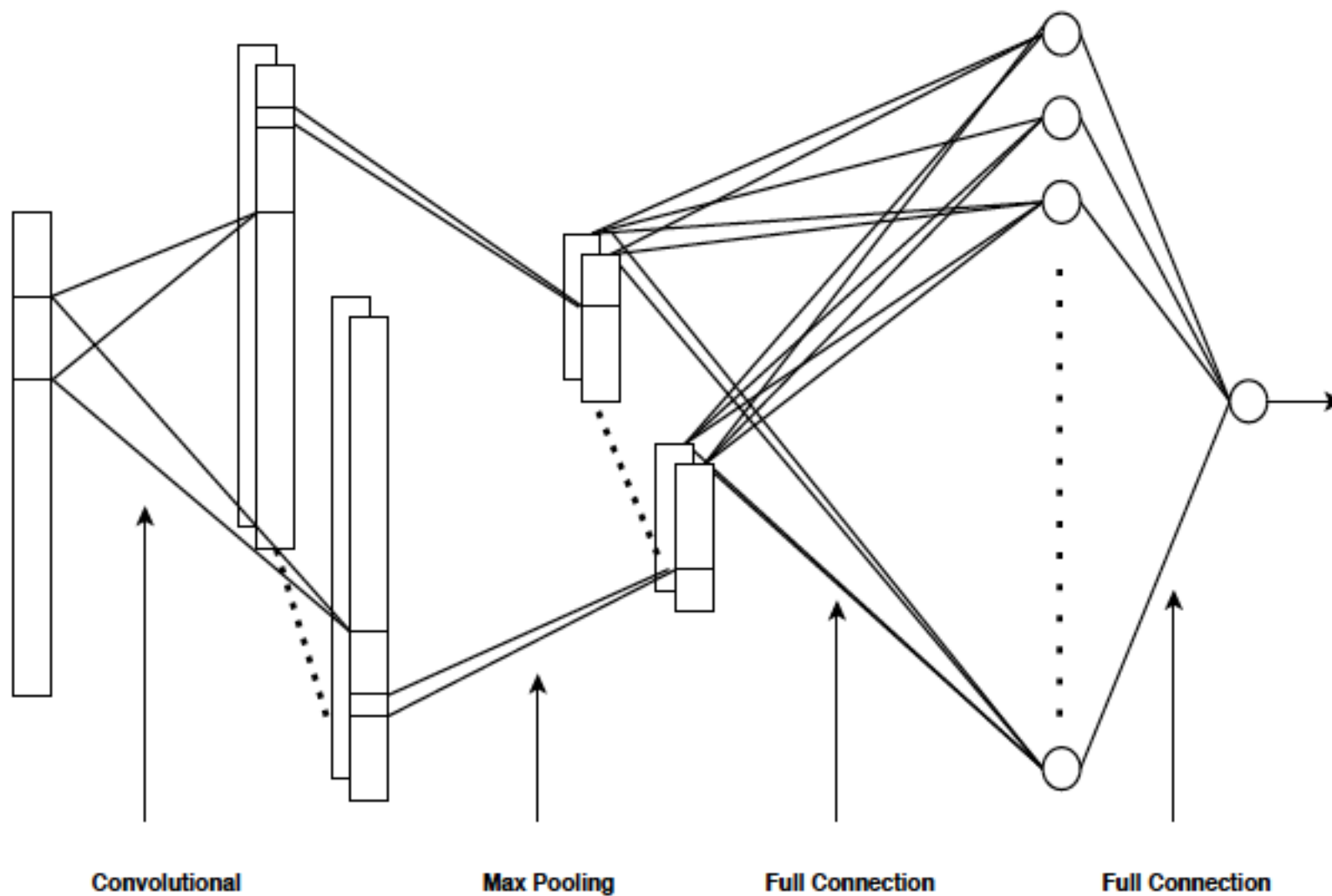


Naïve Bayes	67.53%
Linear Regression	77.71%
Random Forest	71.43%
Feed Forward Network	79.05%
Our Method	82.50%

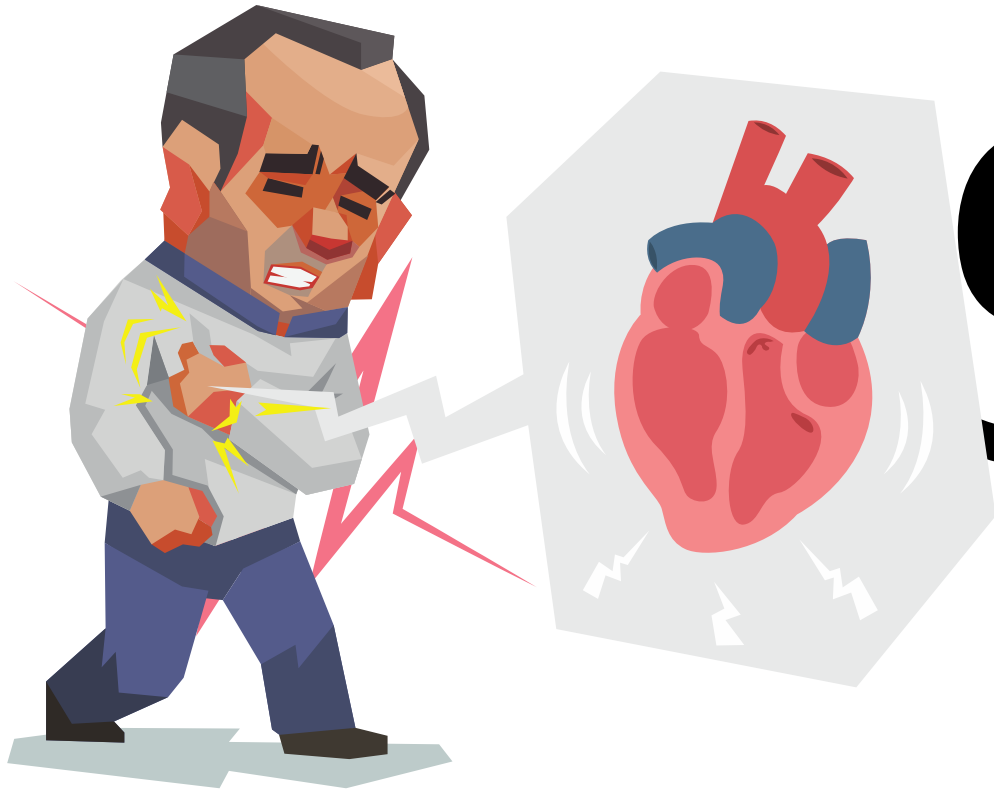
(Dutt et al. 2018)



Not yet published



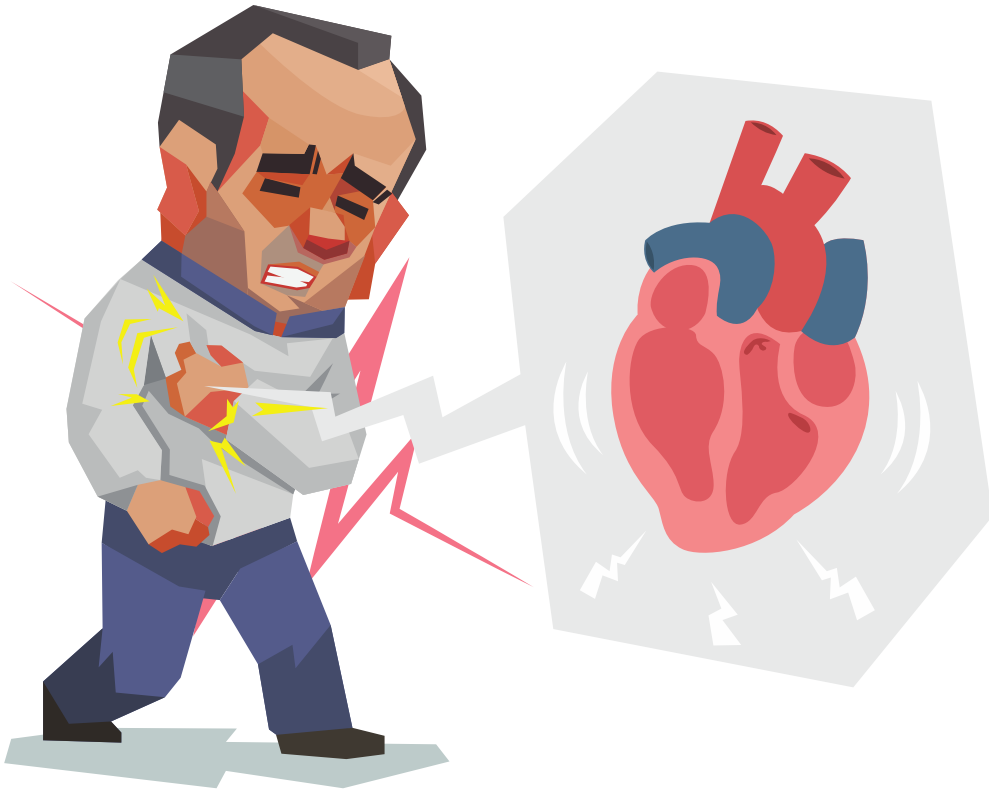
Not yet published



99.18%

Not yet published

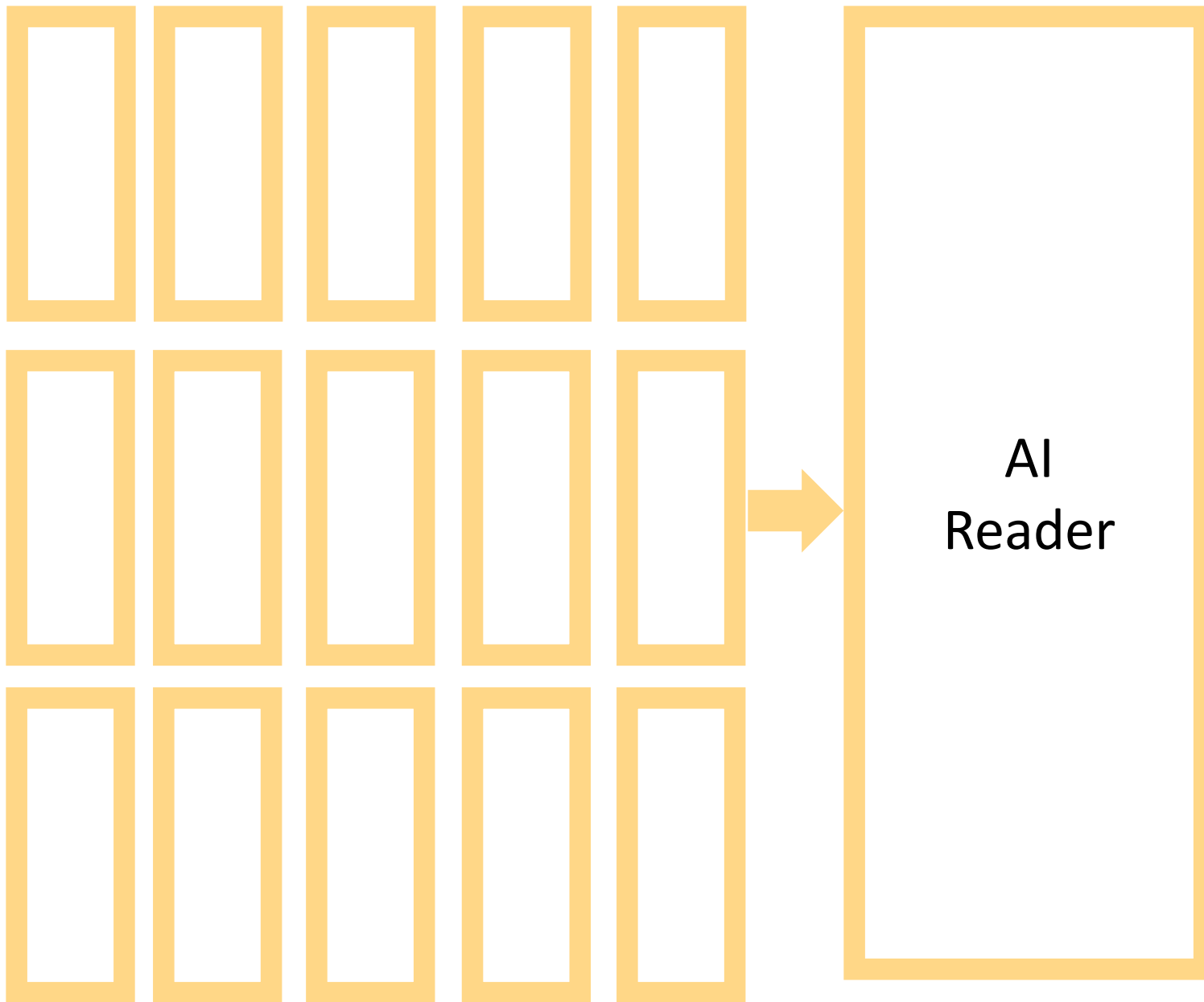
Others work



M.Vijayavan an et al. (2014)	96.50%
S.Yu et al. (2008)	98.71%
M.Das et al. (2014)	97.50%
X.Tang et al.(2014)	91.70%
J.Nasiri et al. (2009)	93.46%
A.Muthuchu dar et al. (2013)	96.00%
Z.Zidelmal et al. (2013)	98.80%
Our work	99.18%

Not yet published





Pasiente
n har
reagert
på
kattehår,
pollen,
hund og
støv. Han
er ellers i
fin form.



(Berge et al., 2017)

Allergi informasjon

Journalkilder

Journaler

- SGYN-K Innkomstjournal 15.04.1998 12:00:00
- SGYN-K Poliklinikknotat, vanlig 02.11.1999 09:29:56
- SGYN-K Brev til henvisende lege, felles 02.11.1999 09:35:08
- SØNH-A Poliklinisk notat - seksjon 12.12.2003 09:22:55
- SØNH-A Kopi av poliklinisk notat 17.12.2003 03:21:31
- SKIR-K Innkomstjournal 29.09.2004 11:31:07
- SØRT-A Innkomstnotat 01.02.2005 12:07:54
- SØNH-A Henvisningseksjon - skannet - 11.08.09 2005 11:23:57

Pasient ID

5425

Søk

Informasjon om valgt pasient

ID: 5425 Hashid: 6hhq1CZD+aDgGS3cdVTClw==
Kjønn: Kvinne Alder: 75

Operasjonsdato: 19.08.2015 09:49:00
Operasjonstype: Reseksjon/eksisjon, fascie (Dupytren), hånd

Ø.hjelp: Nei

Journalinformasjon

Stimulantia Røker ikke.

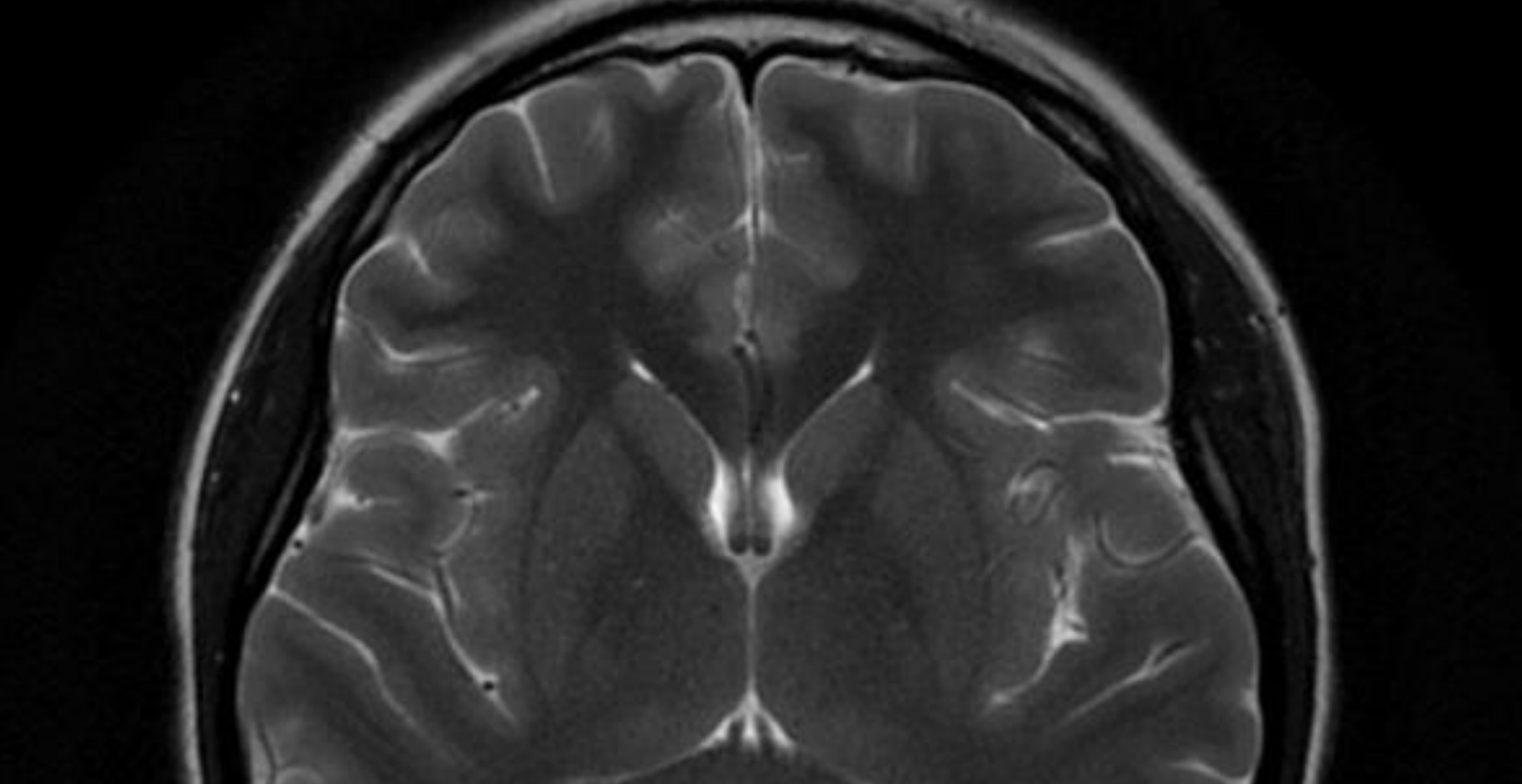
Allergier Morfin, Paralgin, Kodein har hun reagert mot, har allergi mot pollen, støv, hund og kattehår. Tåler ikke skalldyr osv.

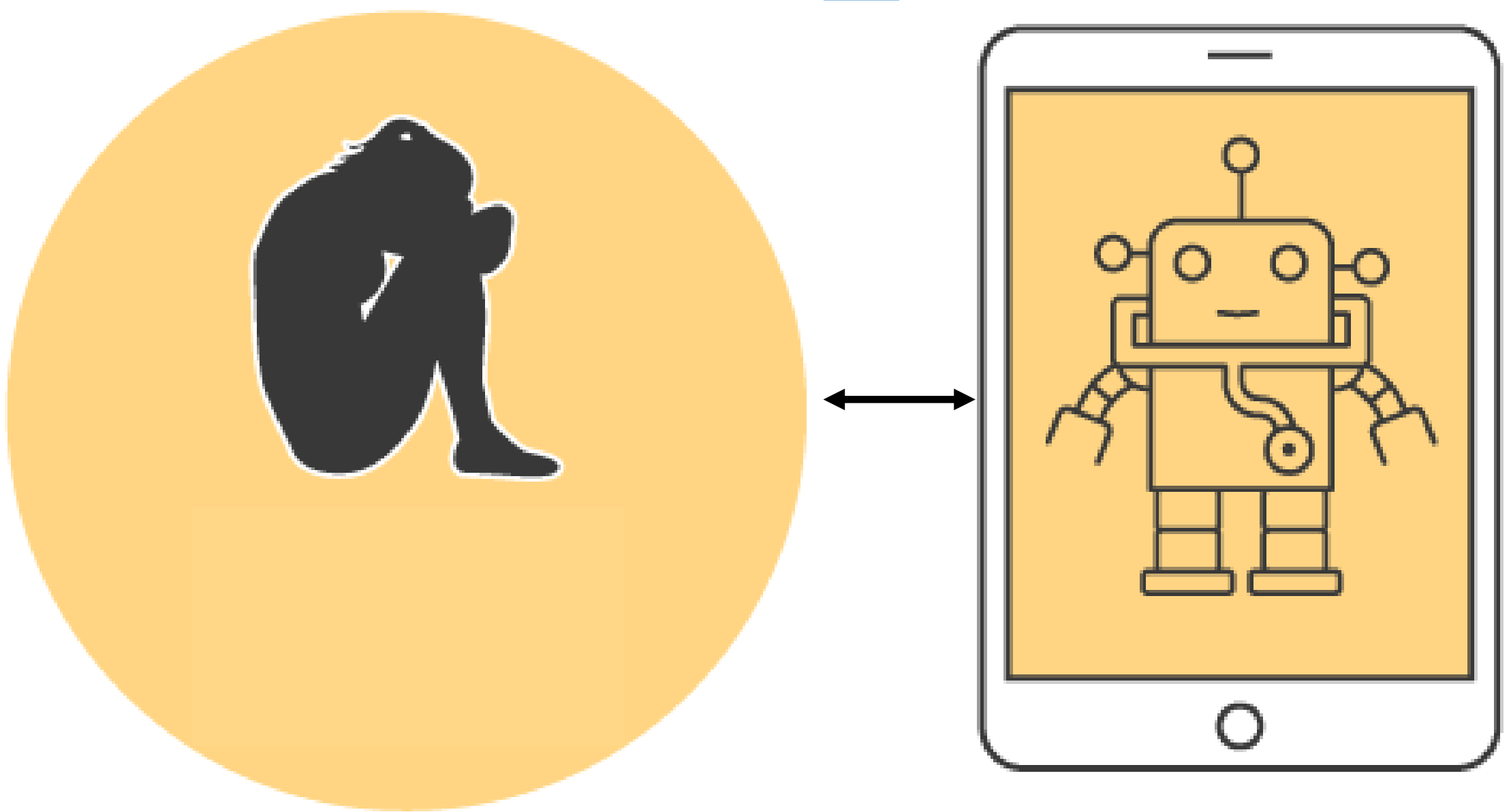
Status 15.04.98 kl 58 år gammel kvinne, god allmenn tilstand, høyde 174 cm.,vekt 75 kg.

Blodtrykk:148/88
Puls: 80, regelmessig.
Cor:regelmessig aksjon, ingen hørbar bilyd.
Pulm: vesikulær respirasjonslyder fra alle lungefeltene. Kan ikke

(Berge et al., 2017)

AI for pasientjournaler

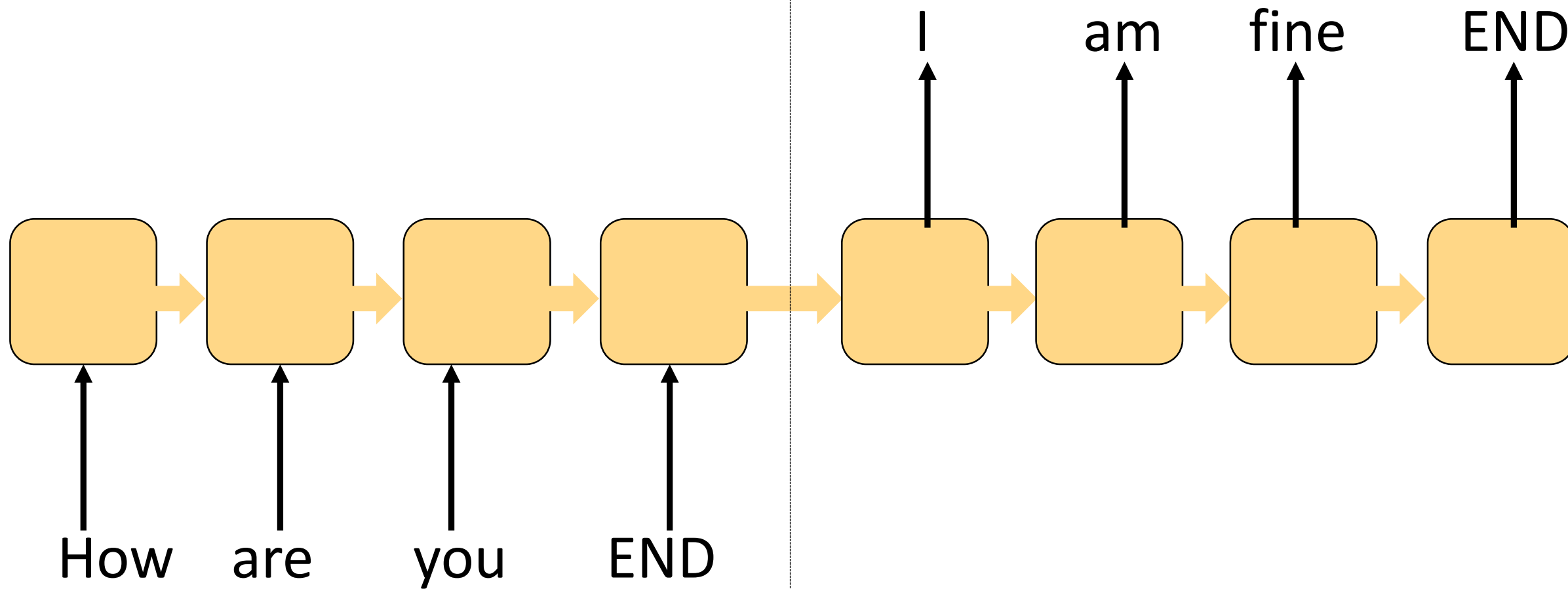




(Brandtzæg et al. 2017) (Kamphaug et al. 2017)

Social Health Bots

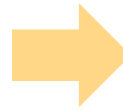




(Brandtzæg et al. 2017) (Kamphaug et al. 2017)



«I'm so sad. I just broke up with my gfriend»



Topic
classification



Question
classification



«If you feel depressed,
contact a medical
professional»

(Brandtzæg et al. 2017) (Kamphaug et al. 2017)



Topic accuracy: 71%
Question accuracy: 31%

(Brandtzæg et al. 2017) (Kamphaug et al. 2017)



Åsmund

I am a boy at the age of 16 who wants to have sex with my boyfriend.



CAIR-bot

I often advice couples to use condoms and use them correctly.



Åsmund

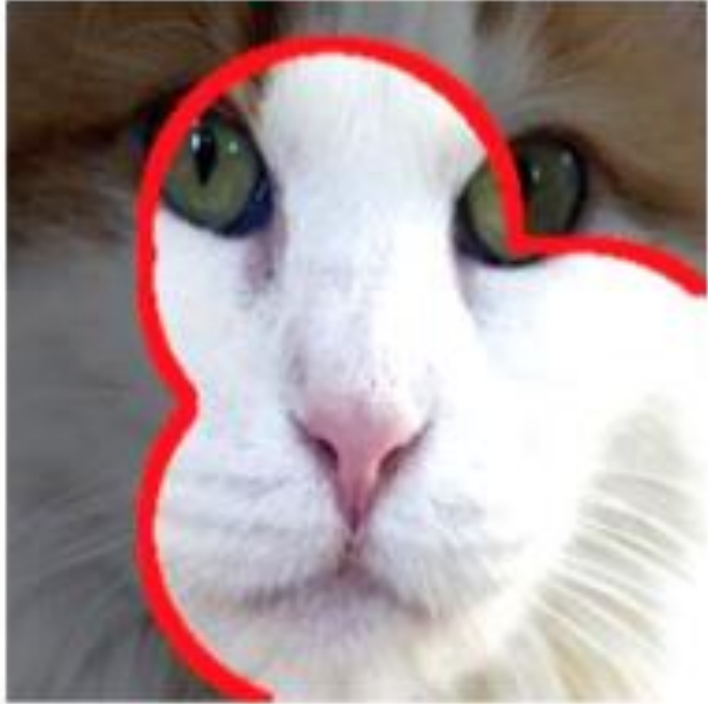
My head hurts.



CAIR-bot

I think you are talking about racism.

The most important is that you are happy with yourself.





Lyst på mer Morten Goodwin?
Abboner på podcast «Game Over?»