

# Virtual coffee break IT Working Group

Algorithms / CoronaCheck-app

*26<sup>th</sup> of October 2022*



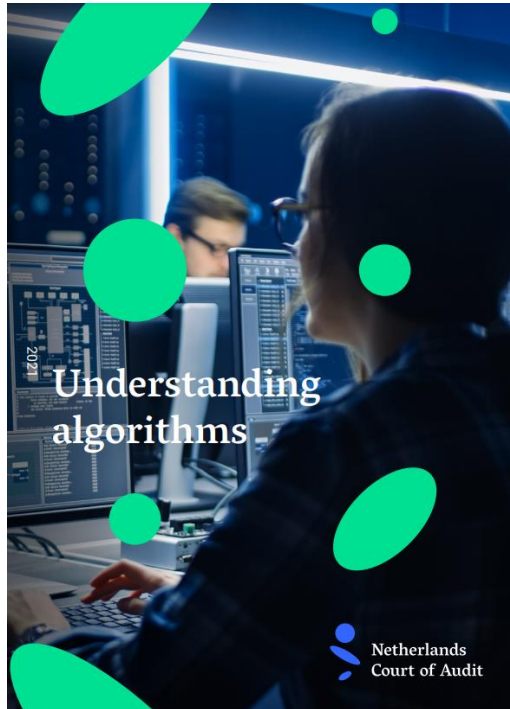
**Netherlands  
Court of Audit**

# Agenda

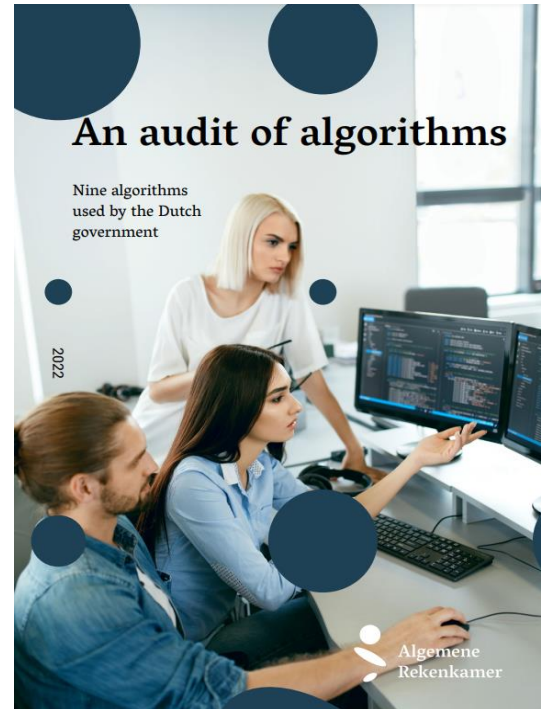
- Introduction
- Some experiences in IT-Audit from The Netherlands
  - Algorithms + Q&A
  - CoronaCheck-app +Q&A
- Final remarks



## 2 reports on Algorithms in 2021 and 2022



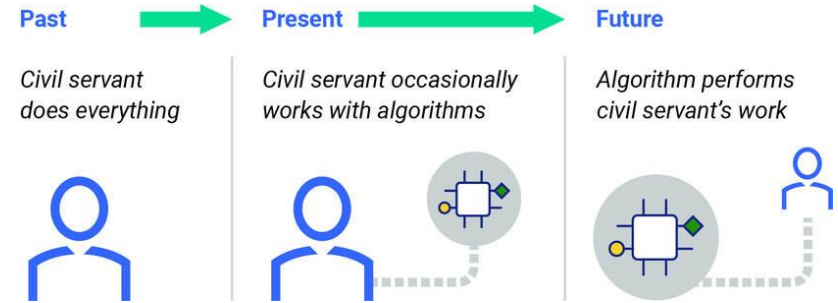
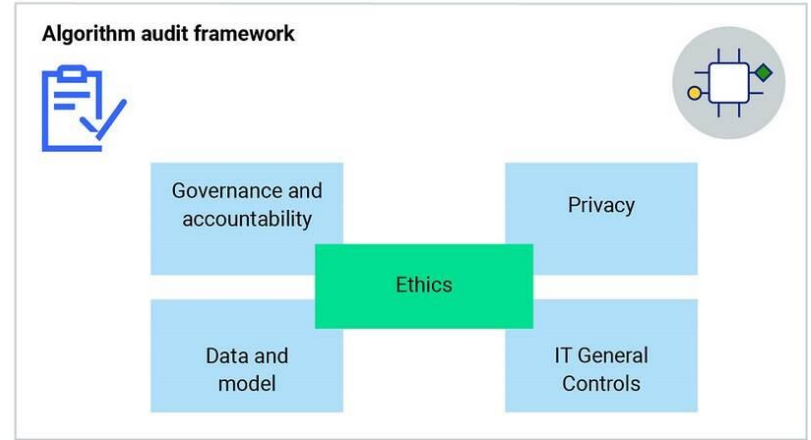
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# Algorithms - 1st audit

- We developed an audit framework
- The algorithms we audited were not black boxes, most algorithms were 'simple'
- Government interests are central to algorithms, not citizens
- Importance of privacy is recognized but ethical aspects need work
- Dependency on external suppliers






# Algorithms – 2nd audit

- We applied the audit-framework to 9 algorithms
- Only 3 out of 9 algorithms met all the basic requirements
- 6 did not and exposed the government to risks:
  - inadequate control over the algorithm’s performance
  - impact to bias
  - data leaks
  - unauthorised access

<https://english.rekenkamer.nl/latest/news/2022/05/18/audit-of-9-government-algorithms-finds-6-do-not-meet-basic-requirements>

Six of the nine algorithms do not meet the requirements set out in the audit framework

	CBR	CJIB	IB	RVO	Toeslagen SVB	DGM (JenV)	RvIG	Police force
<b>Governance and accountability</b>								
Duties and responsibilities	△	△	△	△	△	△	△	△
Risk assessments	△	△	△	△	△	△	△	△
Governance of procurement procedures	△	△	○	○	○	△	△	○
Monitoring	△	△	△	△	△	△	△	△
<b>Data and model</b>								
Bias in model	○	○	○	△	○	○	△	△
Bias in data	○	○	○	△	○	○	△	△
<b>Privacy</b>								
Data protection impact assessment	△	△	△	△	△	△	△	△
Data minimisation	△	△	△	△	△	△	△	△
Privacy policy	△	△	△	△	△	○	△	△
<b>IT general controls</b>								
Access management	△	△	△	△	△	△	△	△
Change management (including logging)	△	△	△	△	△	△	△	△
Back-up and recovery	△	△	△	△	△	△	△	△
<b>Algorithm does/does not meet the requirements set out in the audit framework</b>	✓	✓	✓	✗	✗	✗	✗	✗

 There is a medium to high residual risk in relation to this aspect  
 There is a low residual risk in relation to this aspect  
 This aspect of the audit framework does not apply to the algorithm

# CoronaCheck-app: research case in accountability report department of healthcare

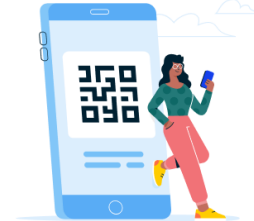


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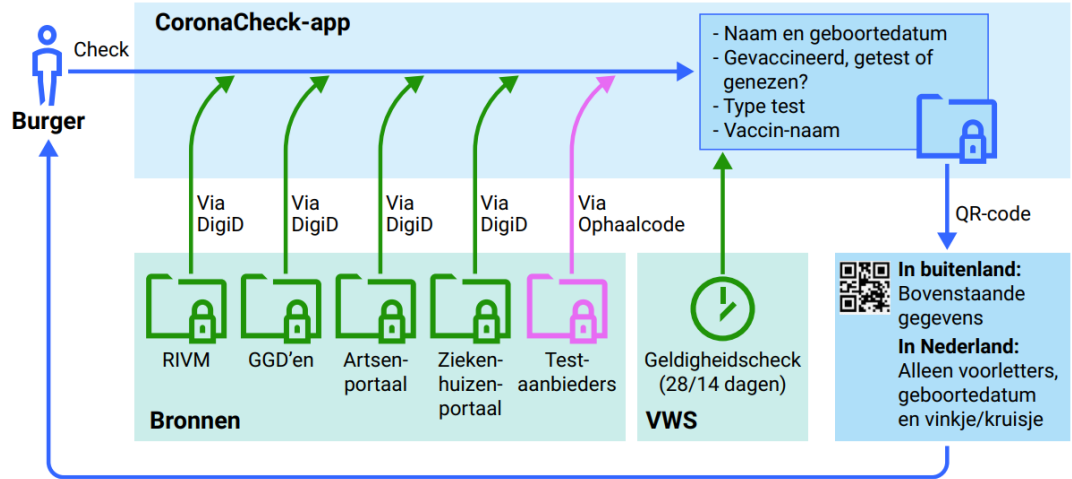
## Get access with a certificate

Thanks to CoronaCheck you can get access to locations and activities within the Netherlands. You can also use it to travel abroad. But only if you've been vaccinated, if you've had corona or if your test proves you don't have coronavirus.



# CoronaCheck-app

- Innovative development
- Privacy & security by design
- Open source
- Checking private test providers
- Chain responsibility governmental organisations



# Final remarks

- Visit our online course, data analytics for audits
- Subscribe to our international news letter, e.g. #1
- Filled in our survey on eID (by mail) already?
- We are always available for further information
- Thanks for your time!

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Module 1.  
**Opportunities for using data analysis  
in audits**



Module 2.  
**From audit objective to data question**



Module 3.  
**The use of R in auditing**



Module 4.  
**Get started with R**







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