

# FANS Nordic Data Science Network

13/9-2022

13.00-16.00 CET



**Frans Holm**  
SAS FANS Denmark Manager



# Nordic FANS

## Local FANS manager

- Pia Rønnevik (Norway)
- Pietari Koskela (Finland)
- Daniel Ringqvist (Sweden)
- Frans Holm (Denmark)

# FANS Nordic Data Science Network

## Agenda

- Welcome
  - by Frans Holm, SAS
- Introduction to the DESERT project at Region Syddanmark
  - by Christian Hardahl, SAS
- Analytical design in the DESERT project at Region Syddanmark
  - by Anders Bendix Madsen, SAS
- Break
- Using forecast and smoothing techniques together
  - by Anette Østbø Sørensen, CapGemini & Pål Navestad, ConocoPhillips
- Analytics and Data Preparation in SAS Enterprise Guide
  - by Jussi Varjus, SAS
- ~~SAS Studio Flows on Viya~~
  - by Antti Heino, SAS
- Closing
  - by Frans Holm, SAS

# News!

Frans Holm, SAS

Using AI-generated synthetic data for easy and fast access to high quality data

# News!

<https://blogs.sas.com/content/hiddeninsights/2022/07/07/ai-generated-synthetic-data-easy-and-fast-access-to-high-quality-data/>

Is data anonymization not a solution?

They manipulate data and thereby destroy data in the process.

This is especially devastating for AI tasks where “predictive power” is essential because bad quality data will result in bad insights from the AI model.

# News!

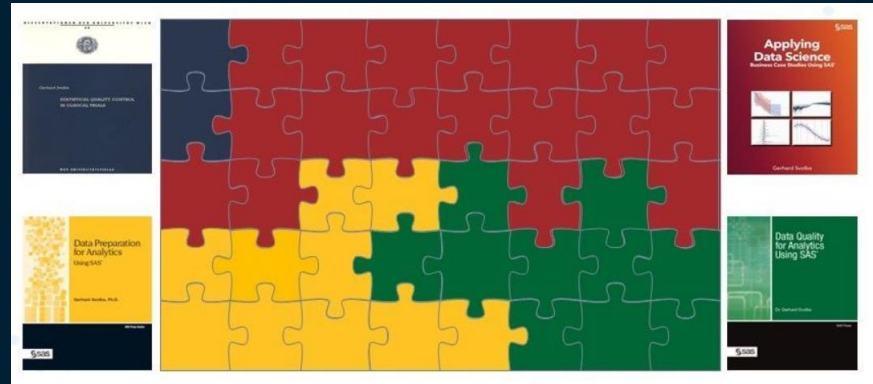
<https://communities.sas.com/t5/SAS-Communities-Library/DataPreparation4DataScience-FeatureEngineering-DQ-DataAssembly/ta-p/791731>

## Data Preparation for Data Science

Data  
Assembly

Data Quality  
for Analytics

Feature  
Generation



DataPreparation4DataScience

[https://github.com/gerhard1050/Data-Preparation-for-Data-Science-Using-SAS/blob/master/DPFA\\_Macros.sas](https://github.com/gerhard1050/Data-Preparation-for-Data-Science-Using-SAS/blob/master/DPFA_Macros.sas)

# Diverse Nyheder

Speed CAS vs. Compute



SAS Compute Server



SAS Cloud Analytic Services (CAS)

Is CAS always  
faster?



It depends.



# News!

Speed CAS vs. Compute

```
mcName=dqMatch(name,'NAME',95,'ENUSA');
```

The screenshot displays the SAS Studio interface. On the left, the 'Transforms' sidebar is open, with 'Matchcodes' selected under 'Data Quality Transforms'. The main workspace shows a table named 'CONTACTS (session)'. Below the table, the configuration for the '1. Matchcodes' transform is visible, showing the source column 'Name' being mapped to a new column 'Name\_MATCH' with a sensitivity of 95 and a character length of 256.

**CONTACTS (session)**

✓ The session table is current to the plan. Result rows: 100

Name_MATCH	Name	Address	City	State	Zip	P
L@8L&Y8\$\$\$\$\$\$\$4#4&B\$\$\$\$\$\$\$	Susan Woodward	152 Black...	Hardy	VA	24101	(679)
4B7~2\$\$\$\$\$\$\$&W_X&B8_Y\$\$\$	Alexander Smith	901 Manor Road	Apex	North Carolina	27502	
MY7F\$\$\$\$\$\$\$C&B\$\$\$\$\$\$\$	James Briggs	1507 Bear Sp...	Pearisburg	Virginia	24134-2365	(717)
3&BM_W\$\$\$\$\$\$\$8&M\$\$\$\$\$\$\$	Dave Campbell	234 Main St.	Cary	NC	27519	
L@8L&Y8\$\$\$\$\$\$\$4#\$\$\$\$\$\$\$	Sue Woodward		Hardy	VA		679-
L@8\$\$\$\$\$\$\$3&~27\$\$\$\$\$\$\$	Kathy Woods	789 Belle Ln	Raleigh	NC	27613	
Y@B\$\$\$\$\$\$\$4~&47\$\$\$\$\$\$\$	Stacey Rhome	14920 Railroa...	Midland	MD	21532-4835	
8&M74\$\$\$\$\$\$\$C@42#&\$\$\$\$\$\$\$	Joshua Davis	2367 Old Ape...	Apex	North Carolina	27502	

**1. Matchcodes** [Run]

Source column: Name | Name of new column: Name\_MATCH | Locale: English (United States) | Definition: Name | Sensitivity: 95 | Character length: 256



# Diverse Nyheder

## Speed CAS vs. Compute

DQ Match Code Generation Comparison Test Results

Engine	Rows	Size (mb)	Match Code Generation Time
Compute (Foundation SAS)	599	0.256	0.31s
CAS	599	0.153	10.63s
Compute	5990	1.5	3.02s
CAS	5990	1.5	10.99s
Compute	59900	14	25.85s
CAS	59900	15	11.85s
Compute	599000	140	4:04m
CAS	599000	153	27.14s
Compute	5990000	1392	50:25m
CAS	5990000	1533 (238 DVR)	1:55m

# News!

<https://explore.sas.com/>

# SAS EXPLORE

A Virtual Event for Technologists

SAS EXPLORE

## DESIGNED WITH YOU IN MIND

Get the knowledge and skills you need to meet your technology goals.

### Data Scientists

Techniques for working with large data sets, gaining trusted insights and solving complex problems faster.

### Data Engineers, Data Stewards and DataOps

Strategies for collecting, managing and converting data into usable information to unlock business opportunities.

### IT, DevOps and Administration

Technical expertise for setting up, configuring and optimizing environments to achieve business results.

### Domain Users and Business Analysts

Tools for gaining insights quickly and solving your biggest business challenges.

# News!

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## SAS EXPLORE EMEA 28 – 29 September

<del>TUESDAY SEPT. 27</del>	WEDNESDAY SEPT. 28	THURSDAY SEPT. 29
9:45 - 10 A.M. Kickoff		
<del>10 - 11:30 A.M. <b>General Session and Keynote</b> SAS CEO Jim Goodnight and CIO Bryan Harris will share the future of SAS technology. Technical experts will lead a demo of SAS® Viya® throughout the analytic life cycle. The session concludes with SAS Hackathon winners sharing their business cases.</del>	10 - 11:30 A.M. <b>General Session</b> Learn about SAS technology advancements and how customers are using SAS to solve their analytics challenges. We'll recognize the SAS User Feedback Award winner and discuss how users are driving innovation.	10 A.M. - 4:30 P.M. <b>Training Sessions by SAS Education</b> Take advantage of free training courses: <ul style="list-style-type: none"><li>• End-to-End Machine Learning in SAS Model Studio</li><li>• Advanced Tips and Tricks for SAS Model Studio</li><li>• Large-Scale Forecasting Using SAS Viya: A Programming Approach</li><li>• Text Analytics Business Case Studies</li><li>• More Analysis, Less Coding: SAS Visual Statistics With SAS Viya for Learners</li><li>• Struggling With Syntax? SAS Studio to the Rescue!</li><li>• Using Python and SAS Viya</li><li>• SAS Visual Analytics</li><li>• SAS SQL</li><li>• SAS Macro Language</li></ul>
11:30 A.M. - 12:15 P.M. <b>Super Demos</b> Choose from demos that provide a quick look at SAS software.		
12:15 - 12:45 P.M. Lunch break and time to engage!		
1 - 4 P.M. <b>Breakout Sessions</b> Expand your SAS knowledge and technical skills with how-to guides, road maps and demos on key topics, including advanced analytics, AI and machine learning, cloud and data management, and more.		
	4 - 4:30 P.M. Keynote	

FANS

## Network meetings

# Next Data Science meeting

[sas.com/fans](https://sas.com/fans) -> Network meetings

- 18/10 Customer Intelligence (Nordic) 10-11/13-15
- 29/11 Data Science (Nordic) 9.30-12.30
- 1/12 Visual Analytics (Nordic) 13.00-16.00

# Network meetings

<https://www.sas.com/sas/events/nordic/fans-nordic-sas-user-group/all-events-dk.html>



## Virtuelle FANS-netværksmøder i Danmark



## Virtual FANS Network Meetings Finland



## Virtuelle FANS nettverksmøter i Norge



## Virtuella FANS-möten i Sverige

# Thank You for Speaking

- Don't invent new things!
- You don't need the answer!



Use the evaluation form  
sent after the meeting

*Do you have:*

Input?

Suggestions?

Ideas?

Share good videos/papers!

# Lottery

Win a SAS gadget!



# Lottery

Today's present!



# Lottery

Sent a mail to:

[frans.holm@sas.com](mailto:frans.holm@sas.com)

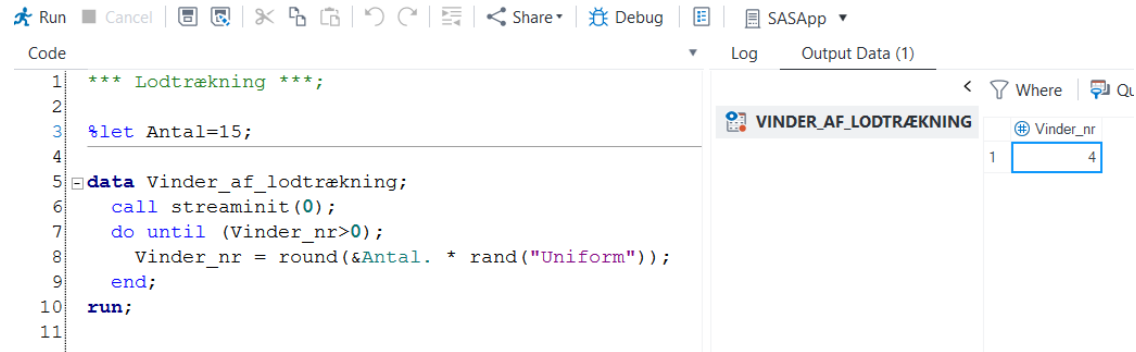
Write:

Subject: Lottery

Mail: Name + Address

Drawing

How:



The screenshot shows the SAS Studio interface. The top toolbar includes buttons for Run, Cancel, and various file operations. The main window is divided into two panes. The left pane, titled 'Code', contains the following SAS code:

```
1  *** Lodtrækning ***;
2
3  %let Antal=15;
4
5  data Vinder_af_lodtrækning;
6    call streaminit(0);
7    do until (Vinder_nr>0);
8      Vinder_nr = round(&Antal. * rand("Uniform"));
9    end;
10 run;
11
```

The right pane, titled 'Output Data (1)', shows a table with the following data:

VINDER_AF_LODTRÆKNING	
	Vinder_nr
1	4

# Introduction to the DESERT project at Region Syddanmark, Denmark

By Christian Hardahl, SAS

# Analytical design in the DESERT project at Region Syddanmark, Denmark

By Anders Bendix Madsen, SAS

# Break

We start again at 14:35 CET

FANS Nordic  
Data Science  
Network

# Agenda

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  - by Anette Østbø Sørensen, CapGemini & Pål Navestad, ConocoPhillips
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### IT, DevOps and Administration

Technical expertise for setting up, configuring and optimizing environments to achieve business results.

### Domain Users and Business Analysts

Tools for gaining insights quickly and solving your biggest business challenges.

# SAS Learning & Networking – free of charge



## SAS Global Communities

[communities.sas.com](https://communities.sas.com)

SAS global community is a vibrant online meeting place for SAS users worldwide. Above 100.000 members engage and share tips & tricks. In the subgroup for [Nordic SAS Users](#), you can stay updated on all the FANS activities, view the agenda, and download presentations from Network gatherings.



## SAS Analytics Explorers

[explorers.sas.com](https://explorers.sas.com)

SAS Analytics Explorers is an invitation-only group dedicated to SAS practitioners exploring analytics, knowledge sharing, having fun, and giving you a competitive edge in your career. If you're a loyal SAS advocate and love analytics, [you can request an invitation today](#).



## Choose Your SAS Journey

[choose-your-sas-journey](#)

Calling all SAS users! We now have 10 FREE knowledge journeys where you can subscribe to the one(s) relevant for you. Our journeys contain expert advice and tips for getting the most from SAS. [Learn more](#).



## Ask the Expert Webinars

[ask-the-expert](#)

SAS experts share in-depth information, tips and tricks on a variety of topics to enable SAS users to gain new insights into using SAS products. Our goal is to make your job easier and empower you with the knowledge you need to be successful at your work. [Ask the Expert](#).



## Meet the Expert 1:1

[meet-the-expert](#)

Get one-on-one time with SAS experts across several technical topics with our SAS 'Meet the Expert' program. [Book an Expert - 30 minutes of free advice](#).

Use the evaluation form  
sent after the meeting

*Do you have:*

Input?

Suggestions?

Ideas?

Share good videos/papers!

# Lottery

Today's present!





**Thank you for  
participating**

Please give feedback

Frans.Holm@sas.com

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