

5 suggestions $\{A, B, C, D, F\}$

$$S = A \rightarrow B \rightarrow C \rightarrow D \rightarrow F$$

$$\underline{P(S)} = P(A)P(R|A)P(L|A,R) \dots P(F|y,R,C,D)$$

$$= \underline{P(A)} \underline{P(R|A)} \underline{P(L|B)} \dots \underline{P(F|D)}$$

$$\begin{array}{l} t: P(S_t) \\ t+1: P(S_{t+1}|S_t) \end{array} \quad \boxed{P(S_t|S_{t+1}) \cdot P(S_{t+1})} \quad \frac{1}{S_t}$$

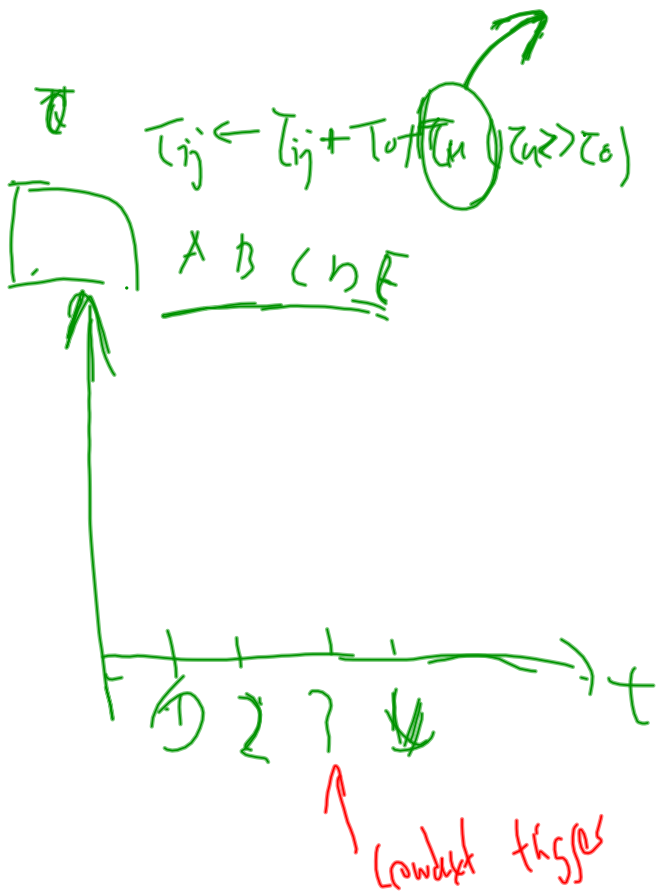
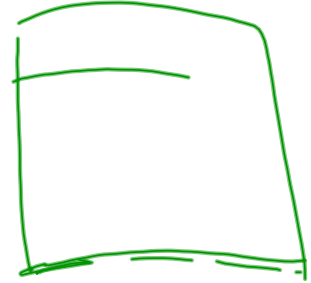
$\leftarrow P(S_t) \cdot L$

ACO

Probability

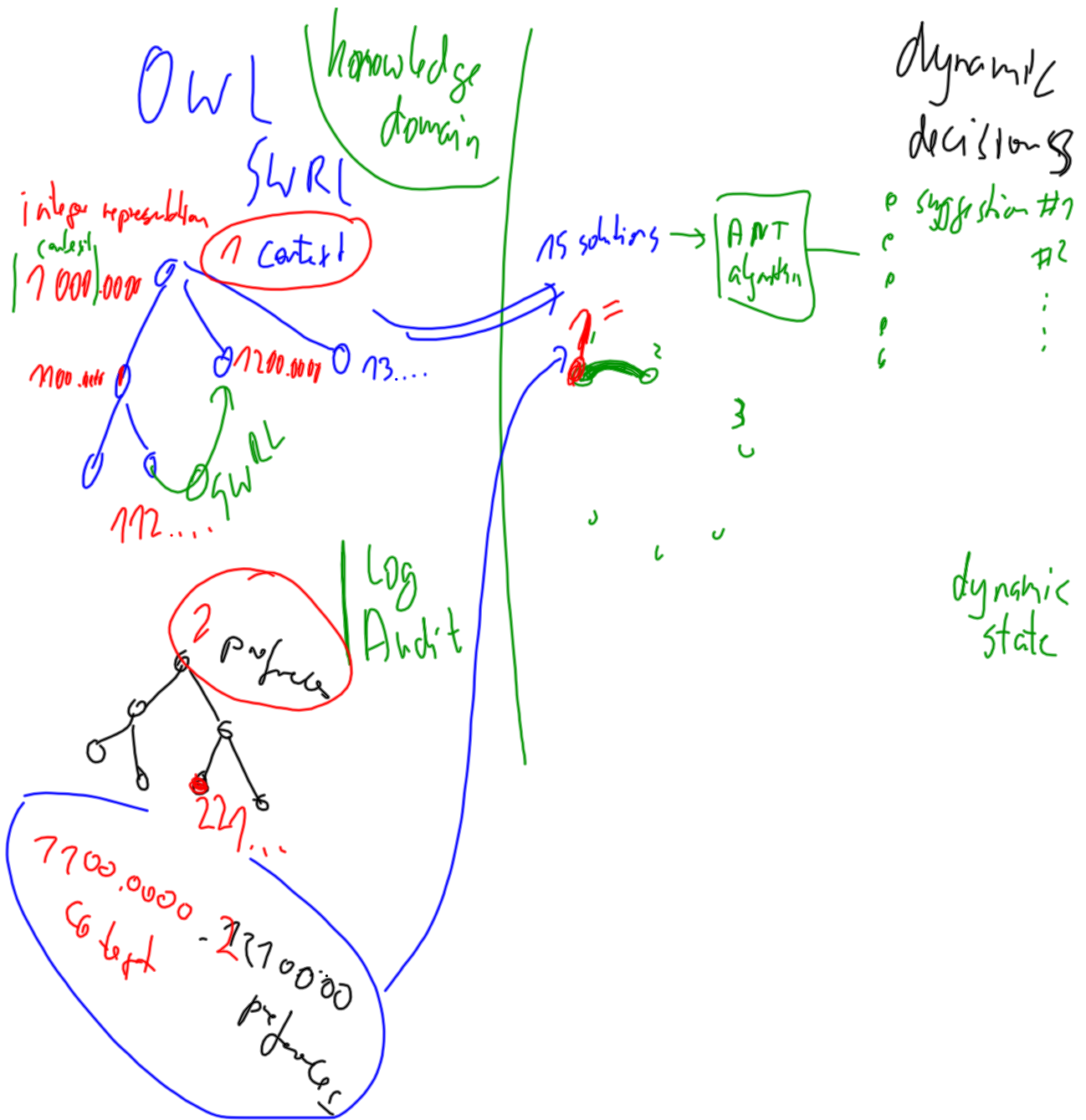
$$P_{ij} = \frac{T_{ij}^{\alpha} \eta_{ij}}{\sum_{k \in M_i} T_{ik}^{\alpha} \eta_{ij}}$$

A
 (B)
 C
 D
 E



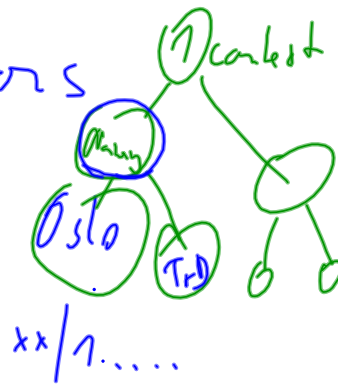
K-means

1 A B B A B B C B



historical decisions

discrete instances



Probability and "group"



reduce complexity

Next step

Song → interface between the
knowledge and the ^{dynamic} decision
domain

Arne → subset of ontology for ^{e.g.} "train drivers"

Susana → implement ontology

Social train ment

1 people
(ii) fact

2 destinations

3 time

4 weather

5 relations → (ii) family, business, social
(i) fact

Rule

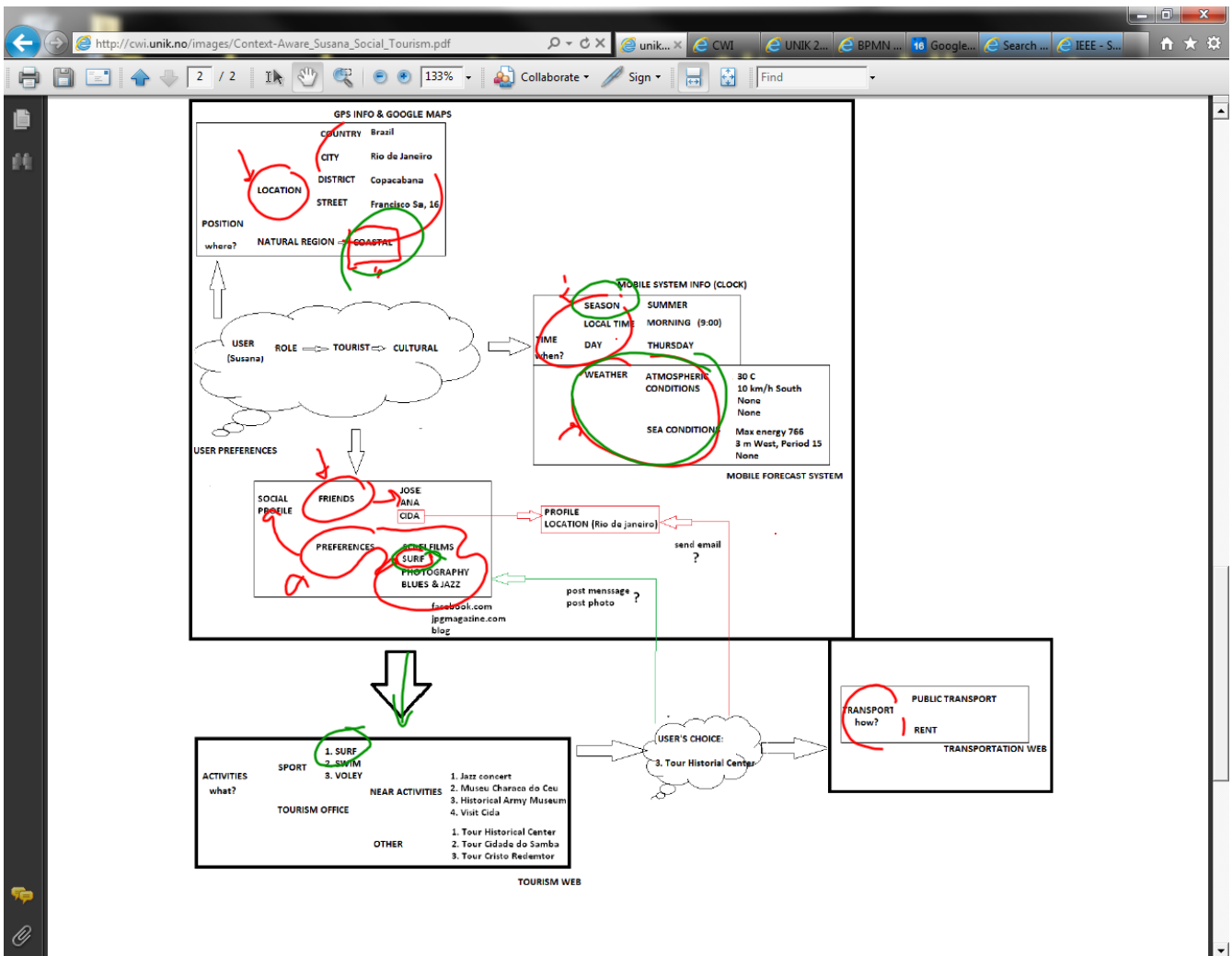
no rain

> no day

< 15km

→ cycle

— . . . — .



Future topics

- Preference ontology → review (scientific lit.)
- Context ontology
- Programming interface to ontologies → PAPI (U. of)
- OData / Web nodes

future plans ++

1. set of rules ⇒ person driver		2nd rule time & availability ⇒		3. rule place ⇒
combination of rules		<u>VS</u>		sequential rules

Search for literature

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Search

Go Search

Main

- CWI Norway
- List of Theses
- List of Courses
- Help
- MediaWiki FAQ
- Semantic Wiki help

Forms (create or edit)

- Add User
- Add ActionItem
- Add Meeting
- Add Master-Thesis
- Add a paper
- Add a lecture
- Add Course
- Project Proposal
- Create a Project
- Add Task
- Add Organisation
- Interested in PhD?

External links

- UNIK wiki
- pSHIELD internal
- JBV project
- UNIK home page
- old Wiki

Support Forms

- Bug Innobørs
- Bug Yeboo

Toolbox

- What links here
- Related changes
- Upload file
- Special pages
- Printable version

How to search for literature at UiO [edit]

- assume that you have a user account at UiO
- remember to register your publication in *Cristin* (old *Frida*)

Library sites [edit]

you have full access to all these sites if you have the UiO VPN up and running. Mac: vpnclient

- <http://ieeexplore.ieee.org> IEEE explorer
- <http://www.springerlink.com/home/main.mpx> Springer Link
- in case that you don't see University of Oslo, close browser and open again*
- <http://www.sciencedirect.com/> ScienceDirect
- <http://portal.acm.org> ACM
-
- electronic books (ebooks): <http://www.netlibrary.com> - remember to have Cisco VPN up and to create an own account. MAC: need to activate "internal pdf reading" in case of Firefox. Safari works (and Automator: sort files, combine pdf generates one pdf output)
- you can also start with <http://scholar.google.no/>

Nye tidsskrifthefter kan leses på nett, her er oversikt over de ferske: <http://www.ub.uio.no/umn/inf/periodika/nyeeltid.html>

Pensumbøker til Akademika, **UB har kjøpt tilgang til Springer e-books** <http://springerlink.metapress.com/books/?Language=English&sortorder=asc&cb=> - [[see more details on UiO-eBooks -> UiOeBooks]]

Set up VPN [edit]

- Latest information from UiO on VPN connectivity** : <http://www.unik.no/drift/english/> -> remotely, alternatively directly to UiO: <https://www.uio.no/tjenester/it/nett/utenfra/vpn/>
- vpn through browser: WebVPN-løsningen <https://vpn.uio.no>

Category: HowTo

Handwritten notes:
 Microsoft academics
 google scholar
 } abstract -> Song, Sufrast Fabrice



UiOs VPN Portal

University of Oslo Library

Access UiOs disk and filesystems

Installing an alternativ VPN klient(AnyConnect)

Web Access

Write web-address you want to access

or Springer (using library)

Home UiO > University of Oslo Library

UiO : University of Oslo Library

Home Subjects Borrowing Using the library Publishing About the library People

Science Library opening!

The opening week of the new Science Library is 14th and 16th of March.
[Read all about it.](#)

Books etc. (BIBSYS) Databases E-journals E-books Google Scholar Articles (Primo)

 [Where do I search?](#)
[Advanced search](#)

Find resources by subject

Examples: Chemistry, Informatics, Law, Medicine, Philosophy

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Borrowing

[Library card](#) [renewal](#) [reserving](#)

Off UiO car

Many of our res connect to UiO
[More on remote](#)

Ask a libra

Book a libr

News

- [Getting the](#)
Feb 21, 2012
- [Grand Open](#)
Feb 15, 2012

Events

- [Cake, opera](#)
[Science Libr](#)
Mar 10, 2012

List of limitations in SWRL

number range	Alternatives
	less than
	greater than

Running SWRL rules on your ontology

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Course	UNIK4710, UNIK9710
Title	Running SWRL rules on your ontology
Lecture date	2012/03/16 09:15h
Lecturer(s), (users)	Josef.Noll
Objective	Establish rules for your own scenario and get them implemented
Learning outcomes	<p>Having joined this lecture, you will</p> <ul style="list-style-type: none"> ✓ have experience in the formulation of rules ✓ have an idea what "Business Rules" are ✓ have tried to convert your rules into Semantic Web Rule Language (SWRL) <ul style="list-style-type: none"> ▪ have seen the <u>limitations of SWRL</u> <i>range of values?</i> ✓ have run the rules on your ontologies ✓ got the desired results. And if not, have understood why you got other results than expected, ✓ have learned who to write results back into your ontology
Pensum (read before)	<p>Read before:</p> <ul style="list-style-type: none"> ▪ Querying the Semantic Web with SWRL: http://2007.ruleml.org/docs/swrl.pdf ▪ Run example from http://wiki.unik.no/index.php/Courses/UNIK4710 <ul style="list-style-type: none"> ▪ Scenario (b) - role-based access
References (further info)	<p>References:</p> <ul style="list-style-type: none"> ▪ Book: See 2012/02/17 and 2012/03/09 "Other Info".
Keywords	SWRL, Rules, OWL

this page was created by Special:FormEdit/Lecture, and can be edited by Special:FormEdit/Lecture/Running SWRL rules on your ontology.

Presentations

ACO Algorithm Presentation by Sichao Song - [Media:Ant-algorithm-Song.pdf](#)

Categories: UNIK4710 | UNIK9710

<http://cwi.unik.no/wiki/SWRL>

http://www.signavio.com/en/bpmn?gclid=CKL18a7-6q4Cfa9YmAcde3E0Jw

try it!

Products References Partners Company

BPMN 2.0 - Process Modeling with Signavio

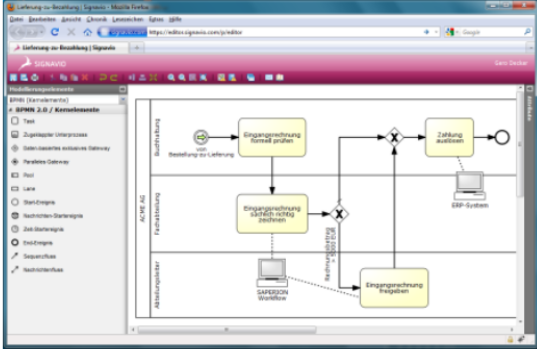
Example of business rules

The Business Process Modeling Notation (BPMN) is the most important modeling standard for Business Process Management.

BPMN 2.0 using Signavio

The Signavio Process Editor fully support the BPMN 2.0 standard. The intuitive user interface helps you to use BPMN 2.0 correctly.

- **For beginners and professionals** - you can choose which language set is appropriate for you
- **Suggestion mechanism** - fast modeling thanks to syntax aids
- **Standardized XML interchange format** - the XML format allows you to use diagrams for process execution
- **Import of XPD and Visio** - migration of existing models made easy



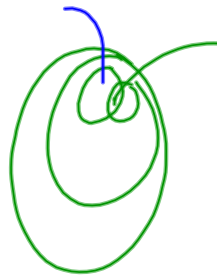
Signavio is used by leading experts

camunda offers professional training on BPMN 2.0. camunda uses Signavio for their trainings.

Free 30-day trial

You can find more details about the Signavio Process Editor on the [product pages](#). Register for the [free 30-day trial](#).

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REQ

No: SKAL
: MA

END SHOULD
: MUST

RULE

LQ Logical
QU quantification

(property)

functional

non-functional quality
noise
delay
jitter

Call is established

~~GO~~