



# Diary Generation from Personal Information Models to Support Contextual Remembering and Reminiscence

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## 1) Motivation / Background

- Vision
- PIMO & Semantic Desktop

## 2) Technical Realization

- User Interface (Client)
- Diary Generation (Server)

## 3) Early Evaluation

## 4) Conclusion & Outlook



Can you name **five things**

you were **concerned with the most**

for an **arbitrarily chosen period of your life,**

e.g. September 2008 or spring 2003 ?



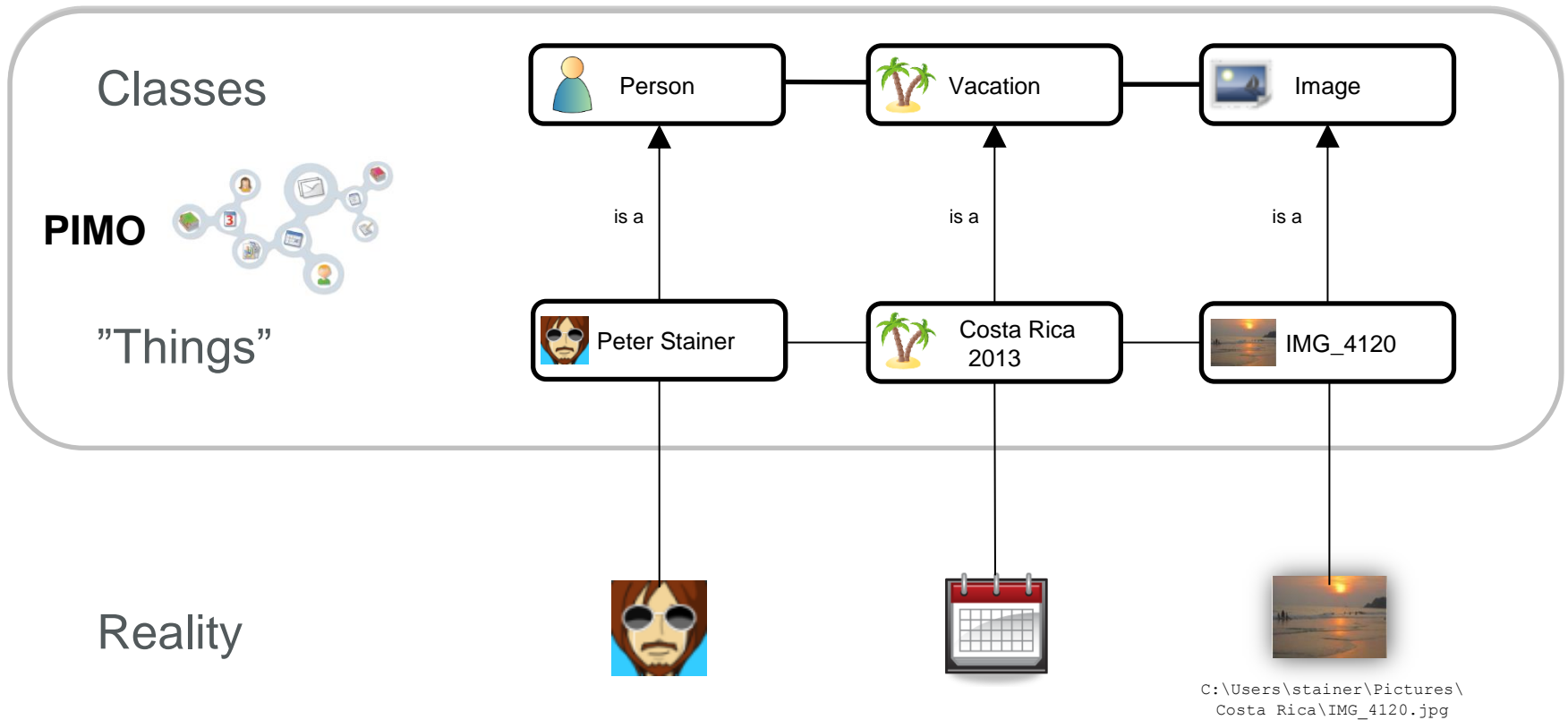


„a diary that writes itself“

**on-demand diary  
generation from  
personal information  
models**



PIMO represents the user's mental model as vocabulary for applications w/o confronting users with the formal knowledge representation



C:\Users\stainer\Pictures\  
Costa Rica\IMG\_4120.jpg



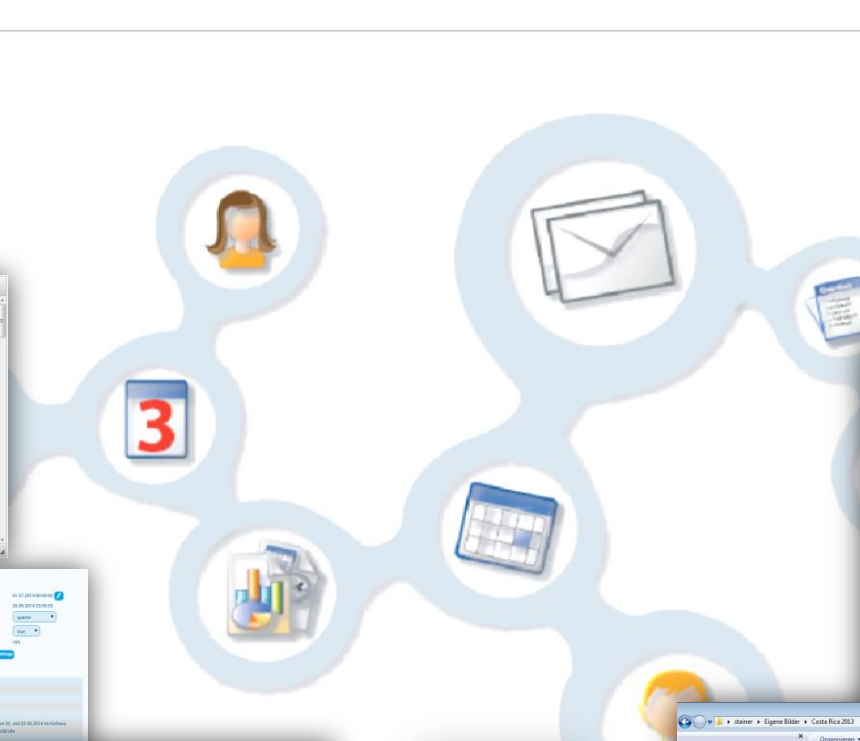
# Ingredients of the Semantic Desktop Infrastructure

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## Dedicated PIMO Apps

## Plug-in to (office) programs

The screenshot shows the ForgetIT WP9 application interface. It features a sidebar with navigation options like 'main', 'agents', 'jobs', and 'docs'. The main content area displays a 'Session Review Recommendations' section with a list of bullet points and a 'Preservation Workflow' section. A small PIMO Software icon is visible in the top right corner of the main content area.



The screenshot shows a Microsoft Word document with a ForgetIT plug-in overlay. The overlay displays a 'Template for review presentation' and a list of 'Annotated Concepts'. The document text includes a greeting to 'WP leaders' and a request for feedback on a template. The ForgetIT interface is integrated into the document's layout, showing a sidebar with navigation options and a main content area with a list of concepts.

The screenshot shows a smartphone displaying the ForgetIT mobile application. The app interface includes a search bar, a list of recent items, and a detailed view of a document titled 'Publikation 2014'. The app is designed for easy access and navigation on a mobile device.

The screenshot shows the ForgetIT web application interface. The main content area features the ForgetIT logo and the tagline 'While preservation of digital'. Below the logo, there is a list of 'Annotated Concepts' and 'Found Concepts'. The interface is clean and modern, with a focus on digital preservation and semantic search.

The screenshot shows a social media or diary application interface. It displays a 'My Diary - July - September 2014' section with a list of entries. Each entry includes a date, a title, and a description. The interface is user-friendly and allows for easy navigation and viewing of diary entries.



# Examples of Semantic Desktop Applications

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ForgetIT Workshop Istanbul, 2014

- Agenda of Istanbul meeting by Claudia

Session Review Recommendations

- be aware of the indicators
- **ToDo**: contribution to WP4 deliverable D4.3 must be done by Bahaa
- **ToDo**: think of showing a demo / video or similar for WP9
  - end of next link to material for WP9 PIMO usage
  - idea: start with the D9.2 Mock-up slide
- RR5: context discussion
  - WP10 as a lightweight approach better
  - WP9 has richer ontology, however w
- **ToDo**: some more content for Twitter on F
- **ToDo**: collaboration meetings: report on th

Preservation Workflow

- question: how does PoF recognizes the co
- PIMO allows to have a collection, e.g.
- two alternatives:
  - the PoF is aware of a collection and if one photo of this collection is to be preserved, then the PoF would request the whole collection
  - the PoF is not aware of the interrelations: if it wants to preserve the photo...the active system would hand over the archival unit. i.e.

**PIMO Software**

Also known as: Personal information Model

A Personal Information Model (PIMO) is used to represent a single users' concepts from his mental model, such as projects, tasks, contacts, organizations, allowing files, e-mails, and other resources of

Home, ForgetIT Project - Mozilla Firefox

www.forgetit-project.eu

Suchen

Aufwärts

Hervorheben

Meistbesucht

New Ticket

Springer für Profession...

**Pimo Annotation**

ForgetIT Project Home...

Search for concepts

Name	
Information M...	X
forgetting	X
remembering	X
EU	X
ForgetIT	X

**Inferred Concepts**

Found Concepts	
Attention	+
Digital Preserv...	+
(js)JavaScript	+
Preserve-or-Fo...	+
multimedia	+
PHP	+
preservation	+
summarization	+
context	+
social media	+

**ForgetIT**

ForgetIT

While preservation of digital content is now well established in memory institutions such as national libraries and archives, it is still in its infancy in most

Semantic Editor (SEED)  
[dedicated app]



FireTag for Mozilla Firefox  
[plug-in]

time	diary entry		
CW 42	I was working at John Deere.		
CW 43	I was working at John Deere.	I attended the GSE lecture.	I attended the MMKI lecture.
CW 44	I attended the GSE lecture.	I attended the MMKI lecture.	
CW 45	I was working at John Deere.	I attended the GSE lecture.	I attended the MMKI lecture.
CW 46	I attended the GSE lecture.	I attended the MMKI lecture.	I attended the GRA lecture.
CW 47	I attended the GSE lecture.	I attended the MMKI lecture.	I attended the GRA lecture.
CW 48	I attended the GSE lecture.	I attended the MMKI lecture.	
CW 49	I attended the GSE lecture.	I attended the MMKI lecture.	
CW 50	I attended the GSE lecture.	I attended the MMKI lecture.	I attended the GRA lecture.
CW 51	I attended the GSE lecture.		

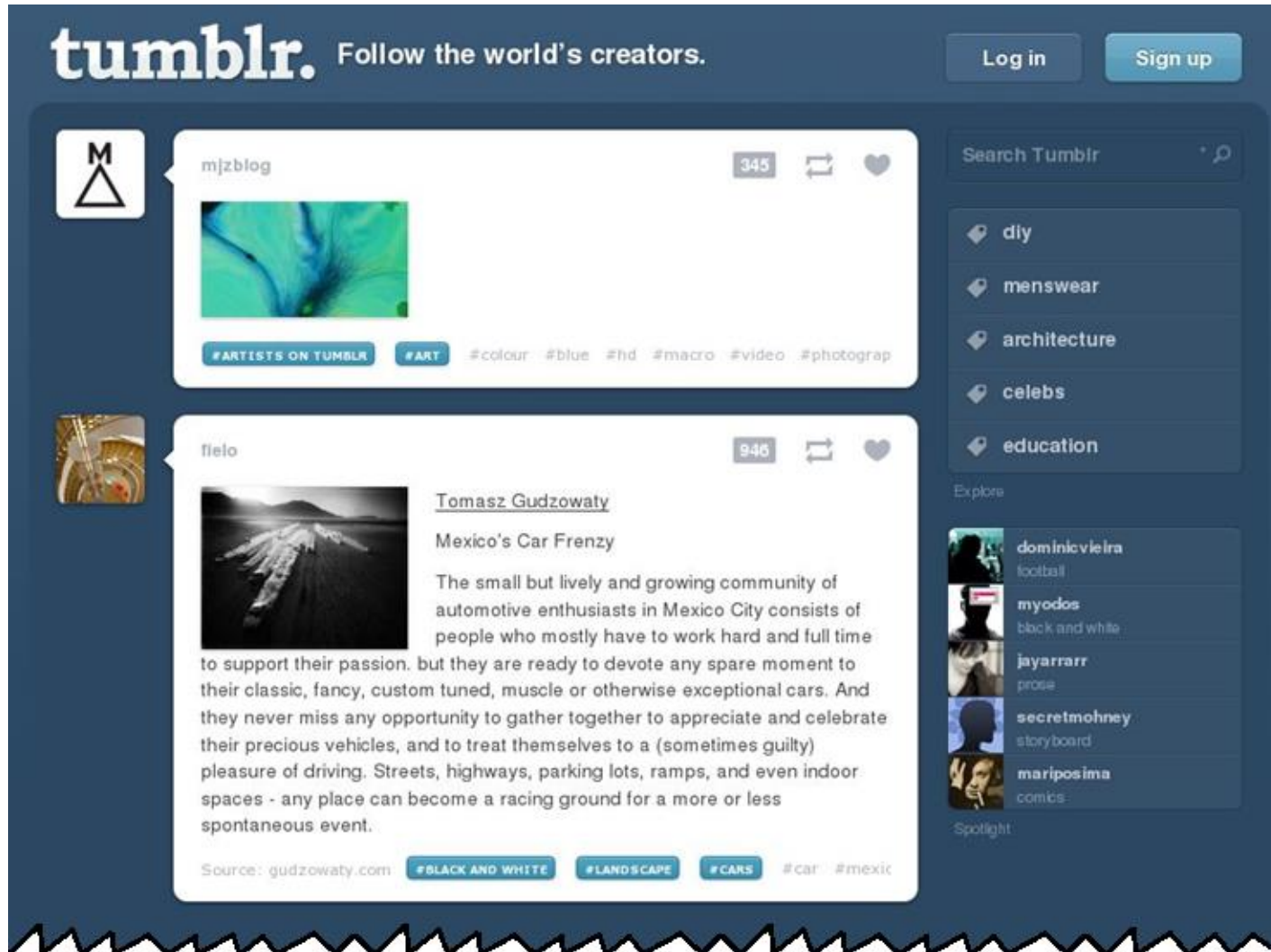


time	diary entry
CW 42-45	I was working at John Deere.
CW 43-50	I attended the MMKI lecture.
CW 43-51	I attended the GSE lecture.
CW 46-50	I attended the GRA lecture.





# Vision (cont'd): Modern Look & Feel



screenshot by [www.web-rater.com](http://www.web-rater.com), 2014



## My Diary: February 2014



03.02.2014 - 19.02.2014  
ForgetIT / ForgetIT WS Luleå 2014  
ForgetIT WS Luleå 2014  
Reiseabrechnung Luleå 2014  
forgetit:project\_meeting\_lulea - L3S Wiki

and 12 more

Keywords:  
forgetit 2014 implementing interface calls meeting luleå lulea cmis preservation haas design manual presentation re wp11 werner wiki minutes general assembly johannes goslar forgetit:project\_meeting\_lulea l3s mydfki dienstreiseverwaltung update team luleat.jpg logistic informationa flugticket ws reiseabrechnung

14.02.2014 - 28.02.2014  
RSIP2-SD / Discuss final review presentation

- Discuss final review presentation
- Datenschutzvereinbarung
- Datenschutzvereinbarung für RSIP

and 7 more

Keywords:  
review final rsip datenschutzvereinbarung meeting presentation discuss prototype new rsip3 re fwd rechnung project leadership developer agenda demonstration rechnung ricoh invoice rsip2 sd last period heiko system slides updates rsip1 fs remember two demonstrations done pls christian showing make sure

Start: 01.02.2014 00:00:00  
End: 28.02.2014 23:59:59  
Time granularity: month  
Discard least important: true  
Data coverage: 34%

Detail Settings Expert Settings

Detail Settings

Sorting: importance  
Include shared: false  
Entries desired: 10  
Entries displayed: 10  
Source items available: 203  
Source items included: 70  
Source items excluded: 133  
Query duration: 849 ms  
Diversity: + -  
Rare Things: + -  
Rich Media Things: + -

Context

- ForgetIT
- PIMO
- use case



## date and headline

associated photos

03.02.2014 - 19.02.2014  
ForgetIT / ForgetIT WS Luleå 2014

ForgetIT WS Luleå 2014  
Reiseabrechnung Lulea 2014  
forgetit:project\_meeting\_Lulea - L3S Wiki  
and 12 more

Keywords:  
forgetit 2014 implementing interface calls meeting luleå lulea cmis preservation haas design manual presentation re wp11 werner wiki minutes general assembly johannes goslar forgetit:project\_meeting\_lulea l3s mydfki dienstreiseverwaltung update team luleat.jpg logistic informationa flugticket ws reiseabrechnung

most prominent things

most prominent annotations

most prominent keywords



My Diary: February 2014

03.02.2014 - 19.02.2014  
ForgetIT / ForgetIT WS Luleå 2014

- ForgetIT WS Luleå 2014
- Reiseabrechnung Luleå 2014
- forgetit:project\_meeting\_lulea - L3S Wiki

and 12 more

Keywords:  
forgetit 2014 implementing interface calls meeting luleå lulea cmis preservation haas design manual presentation re wp11 werner wiki minutes general assembly johannes goslar forgetit:project\_meeting\_lulea l3s mydfki dienstreiseverwaltung update team luleat.jpg logistic informations flugticket ws reiseabrechnung

14.02.2014 - 28.02.2014  
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and 7 more

Keywords:  
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Start: 02.2014 00:00:00  
End: 02.2014 23:59:59  
Time granularity: month  
Discard least in: 10  
Data covered: 34%

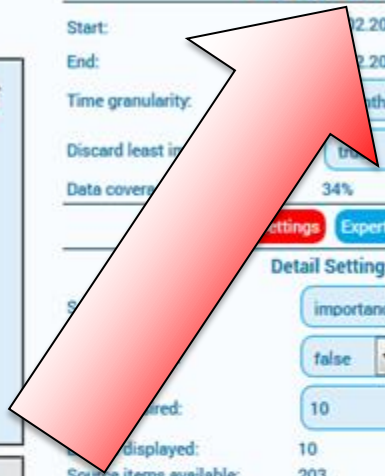
Settings Expert Settings

Detail Settings

importance  
false  
10  
10  
Source items available: 203  
Source items included: 70  
Source items excluded: 133  
Query duration: 849 ms  
Diversity: + -  
Rare Things: + -  
Rich Media Things: + -

Context

- ForgetIT
- PIMO
- use case



## My Diary: 2014



06.01.2014 - 22.12.2014

ForgetIT

- ForgetIT Description of Work
- ForgetIT WS Luleå 2014
- ForgetIT Workshop Turin 2014
- Review ForgetIT 2014 in Kaiserslautern
- Istanbul 2014
- [ForgetIT-all] Istanbul Meeting and the HOTEL
- ForgetIT-Team-Luleat.jpg
- QRPR Q1/14

331 more images

and 722 more things

Keywords:

jpg forgetit 2014 review meeting dfki wpleader wp9 pimo y2 edinburgh re report istanbul preservation q3 diary jilek reports 14 workshop survey quarterly wp4 update advisory l3s board kaiserslautern wp3 q1 telco information heiko mb 2015 evaluation diplomarbeit pptx forgetting



15.01.2014 - 10.11.2014

Schüler-Praktikum 2014

- Schüler-Praktikum 2014
- AirScript
- HugoBallInternship2014 - kmintern

4 more images

and 18 more things

Keywords:

2014 dfki praktikum schülerpraktikum schüler jpg intern ausgabe 14 zusage 24.07.2014 hugo ball 3.01 airscript august september fwd topics 30 möglichkeit docx internship 32 praktikanten 31 november kmintern anhang bescheinigung bestätigungen praktikumszeugnisse tester img\_0001 img\_0005 img\_3854 infopage hugoballinternship2014 teilnehmen teil

24.02.2014 - 19.12.2014

Start: 01.01.2014 00:00:00

End: 31.12.2014 23:59:59

Time granularity: year

Discard least important: true

Data coverage: 43%

Detail Settings Expert Settings

- ### Context
- DFKI GmbH
  - ForgetIT
  - Sven Schwarz
  - Kaiserslautern
  - PIMO
  - KM
  - Andreas Dengel
  - Ansgar Bernardi
  - mobile
  - Evaluation
  - Deutschland
  - EU
  - ADWw AdiWa
  - Cloud
  - RICOH Ricoh
  - Review
  - App
  - Personal Information Management
  - RSIP2-SD
  - seed
  - SmartWerk
  - RSIP3-DE
  - Maria Wolters
  - Praktikum
  - Patent

The screenshot displays a digital diary application interface. At the top left, there is a navigation bar with icons for home, search, and help. The main header reads "My Diary: 2014". A large red arrow points from the top right towards the first diary entry.

The first diary entry is for the period "06.01.2014 - 22.12.2014" titled "ForgetIT". It includes a photo of two men and a list of items: "ForgetIT Description of Work", "ForgetIT WS Luleå 2014", "ForgetIT Workshop Turin 2014", "Review ForgetIT 2014 in Kaiserslautern", "Istanbul 2014", "[ForgetIT-all] Istanbul Meeting and the HOTEL", "ForgetIT-Team-Luleat.jpg", and "QRPR Q1/14". There are buttons for "331 more images" and "and 722 more things".

Below the entry are "Keywords:" and a list of terms: "jpg forgetit 2014 review meeting dfki wpleader wp9 pimo y2 edinburgh re report istanbul preservation q3 diary jilek reports 14 workshop survey quarterly wp4 update advisory l3s board kaiserslautern wp3 q1 telco information heiko mb 2015 evaluation diplomarbeit pptx forgetting".

The second diary entry is for "15.01.2014 - 10.11.2014" titled "Schüler-Praktikum 2014". It includes a photo of a group of people and items: "Schüler-Praktikum 2014", "AirScript", and "HugoBallInternship2014 - kmintern". There is a button for "and 18 more things".

Below this entry are "Keywords:" and a list of terms: "2014 dfki praktikum schülerpraktikum schüler jpg intern ausgabe 14 zusage 24.07.2014 hugo ball 3.01 airscript august september fvd topics 30 möglichkeit docx internship 32 praktikanen 31 november kmintern anhang bescheinigung bestätigungen praktikumszeugnisse tester img\_0001 img\_0005 img\_3854 infopage hugoballinternship2014 teilnehmen teil".

At the bottom, a third entry is partially visible for "24.02.2014 - 19.12.2014".

On the right side, there is a "Context" sidebar with a red border. It contains a list of entities and terms: "DFKI GmbH", "ForgetIT", "Sven Schwarz", "Kaiserslautern", "PIMO", "KM", "Andreas Dengel", "Ansgar Bernardi", "mobile", "Evaluation", "Deutschland", "EU", "ADWw AdiWa", "Cloud", "Ricoh", "Review", "App", "Personal Information Management", "RSIP2-SD", "seed", "SmartWerk", "RSIP3-DE", "Maria Wolters", "Praktikum", "Patent", and "Projektplan".

At the top right of the sidebar, there are settings for "Start:" (01.01.2014 00:00:00), "End:" (31.12.2014 23:59:59), "Time granularity:" (year), "Discard least important:" (true), and "Data coverage:" (43%). There are also buttons for "Detail Settings" and "Expert Settings".

## 2012

- ADiWa
- Deutschland
- BMBF
- SmartOffice
- Köln
- ConTask
- ARIS
- Google Inc.
- Apple
- Innovation
- Semantic File Explorer
- Wissensmanagement
- Düsseldorf
- IEEE
- skipforward
- Infos zu gnwosis und elsevier Challenge für internen Newsletter
- ADiWa G4 Deliverable Evaluation
- CoPLANT

## 2014

- DFKI GmbH
- ForgetIT
- Sven Schwarz
- Kaiserslautern
- PIMO
- KM
- Andreas Dengel
- Ansgar Bernardi
- mobile
- Evaluation
- Deutschland
- EU
- ADiWa
- Cloud
- Ricoh
- Review
- App
- Personal Information Management



# My Timeline of 2014

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**PIMO Timeline**

Select types to show (subtypes included):

- Agent
- Contract
- LifeSituation
- Location
- Project
- SocialEvent
- Topic
- Note

show only my resources

**Timeline Events:**

- What makes a ...
- Erste Nutzen
- Besprech
- Erstes B
- Fragen
- Studienarbeit
- Besprechung m
- Besprechung m
- Besprechung mit Heiko
- Diskussion erster Mockups
- SIMILE Timeline
- Mockup Tools
- Besprechung mit Sven
- Pizzabacken
- Omas Haus
- Besprechung mit Heiko
- Studiuns-Diary
- Besprechung mit Heiko und Sven
- Konkretisierung DA-Thema
- JavaScript Tutorial
- Pizzaessen
- Diary Mockups
- Related Work
- Besprechung mit Sven
- Besprechung mit Heiko
- Einsichtnahme letzte Prüfung
- Konfirmation
- Besprechung mit Sven
- Besprechung mit Heiko
- Mehr Fragen
- Fragen
- Besprechung mit Heiko
- Besprechung mit Heiko
- Related Work geprüft
- Recherche zu Web Scraping
- Abschlussvor
- Muttertagsess
- Besprechung mit
- PIMO Diary Bespre
- Besprechung mit Bahaa
- Status-Besprechung mit Heiko
- Bug in HTML SEED gefunden
- Besprechung mit Heiko (Early Eva
- Feedback zu P
- Idee
- Konzepte in PIMO Diary
- Diary App Layout
- Kerwe-Essen mit Family
- Status-PIMO Diary
- PIMO Diary Status/Plan
- Status-Update mit Heiko
- Pizza
- Umlaute-Bug in Label-Ge
- FCK-Heimsiel
- Überprüfe möglichen Bug
- Überarbeitete Label-Generierun
- SEED Feedback
- Diplomarbeit
- Bestätigung der Anmeldung der Di
- Anmeldung Diplomarbeit
- Spreading Activation
- Besprechung mit Heiko
- Besprechung mit Heiko
- Besprechung mit Sven
- Ideen zu Landmarks
- Besprechung mit Heiko
- Problem fehlender Creation-Dates
- Candidate-Value-Berechnung Ideen
- Besprechung mit Sven
- Besprechung mit Heiko und Sven
- Thesis Outline
- Diary App Ideen
- Diary App auf Phone
- DiaryAPI
- Label-Generierung repariert
- Besprechung mit Heiko

**Timeline Navigation:** Apr 2014, Apr, May, Jun 2014, Jul, Aug 2014





# My Diary of 2014

**25.02.2014 - 13.08.2014**  
Diplomarbeit Christian Jilek / diary




- PIMO Diary Besprechung
- Status PIMO Diary
- erste mock-up Session Jilek
- treffen mit jilek
- Jilek Konkretisierung Thema Diary
- Besprechung mit Bahaa

[and 62 more things](#)

**Keywords:**  
besprechung diary heiko sven pimo app evtl 1 diplomarbeit status fragen idee seed jilek mockups todo work 2 ideen related beispiel recherche z.b text landmarks meeting konzepte 5 feedback evaluation web timeline thesis treffen update datenverdichtung anmeldung 3 erstes abstraktion

**29.03.2014 - 09.08.2014**  
Pizza / Pizzabacken



- Pizza
- Pizzabacken
- Pizzaessen

**Keywords:**  
pizzaessen pizzabacken pizzabacken.jpg pizza 29.03.2014 lecker family 05.04.2014 friends

**02.07.2014 - 04.08.2014**  
Notes / Bug

- Umlaute-Bug in Label-Generierung von Notes repariert
- Überprüfe möglichen Bugfix für Umlaute
- Überarbeitete Label-Generierung für Notes


[and 1 more things](#)

**Keywords:**  
label generierung umlaute notes repariert bug überprüfe bugfix überarbeitete bahaa evtl behoben absprache nochmal verbessert hoffentlich seed text bekommen abstimmung möglichkeit newlines

**27.06.2014**  
Spreading Activation



**01.06.2014**  
Kerwe-Essen mit Family



**21.02.2014 - 21.05.2014**  
Diskussion Fragen zur Evaluation / Themenfindung Christian Jilek



- Diskussion Fragen zur Evaluation
- Themenfindung Christian Jilek
- Themenabstimmung Jilek

**Keywords:**  
jilek evaluation themenabstimmung fragen themenfindung christian diskussion


**18.03.2014 - 13.05.2014**  
Abschlussvortrag Studienarbeit Wirtschaftsinformatik

- Abschlussvortrag Studienarbeit Wirtschaftsinformatik
- Studienarbeit
- Einsichtnahme letzte Prüfung

[and 1 more things](#)

**Keywords:**  
studienarbeit letzte wirtschaftsinformatik einsichtnahme diplomprüfung abschlussvortrag prüfung 24.03.2014 vergessen dbaw 11 15 uhr ag prof härder 36 termin insb 18.03.2014 yeah bestanden datenbankanwendung en kapitel 13.05.2014 letzter echter uni juhu 03.04.2014 feedbackgespräch kleinere tipps abgeholt hinsichtlich formulierung kapiteleinteilungen merke lang

**17.03.2014 - 14.04.2014**  
FC Kaiserslautern / FCK-Heimspiel / Kaiserslautern



- FCK-Heimspiel
- FC Kaiserslautern

**Keywords:**  
1 fck heimspiel fc kaiserslautern fckticket.jpg endlich auf'm betze köln


**04.04.2014**  
Omas Haus



- Omas Haus

**Keywords:**  
omas haus omashaus.jpg fertig 04.04.2014 ausgeräumt

**23.03.2014**  
Konfirmation



- Konfirmation

**Keywords:**  
konfirmation aussicht.jpg 23.03.2014 anlässlich freunden bekannten essen coole aussicht

**27.02.2014**  
Proof of Concept



**Keywords:**  
proof concept 27.02.2014 meilenstein prinzipielle durchführbarkeit vorhabens belegt quelle wikipedia



## Heiko's initial entry


12.03.2014 - 31.03.2014  
Related work DA Jilek identifizieren / Diplomarbeit Christian Jilek

- Related work DA Jilek identifizieren **1**
- Vorarbeiten des DFKI mit Relevanz zu Diary **2**
- Jilek Konkretisierung Thema Diary **3**
- Jilek Kick-off **4**
- ChurchCherubiniOliver14: A large-scale study of daily information needs captured in situ **5**
- Diplomarbeit ab nächster Woche **6**

[hide less important things](#)

Keywords:  
jilek diary thema kick dfki related work woche daily large information diplomarbeit konkretisierung nächster study identifizieren vorarbeiten relevanz churchcherubinioliver14 scale captured situ sven bahaa seed app alzayat firetasks rahman pimostation pimomeeting michael kraus pimocal nops mohamed badreldin

## now including Christian's shared data




12.03.2014 - 31.03.2014  
Diplomarbeit Christian Jilek / diary

- Related work DA Jilek identifizieren **1**
- Vorarbeiten des DFKI mit Relevanz zu Diary **2**
- Jilek Konkretisierung Thema Diary **3**
- Jilek Kick-off **4**
- Besprechung mit Heiko
- Besprechung mit Heiko
- Besprechung mit Heiko und Sven
- Besprechung mit Sven
- ChurchCherubiniOliver14: A large-scale study of daily information needs captured in situ **5**
- Related Work geprüft
- Related Work
- Besprechung mit Heiko
- Besprechung mit Heiko
- Diary Mockups
- Besprechung mit Sven
- Mehr Fragen
- Fragen
- JavaScript Tutorial
- pimo5 - smartoffice
- Diplomarbeit ab nächster Woche **6**

[hide less important things](#)

Keywords:  
besprechung diary heiko sven work related jilek fragen mockups app pimo dfki pimo5 seed tutorial diplomarbeit thema geprüft woche daily large information javascript kick 5 smartoffice buoyancy preservation konkretisierung nächster study identifizieren vorarbeiten relevanz churchcherubinioliver14 scale captured situ z.b 4



include shared information

# Basic, Detail & Expert Settings

**Start:** 01.01.2014 00:00:00

**End:** 31.12.2014 23:59:59

**Time granularity:**  ▾

**Discard least important:**  ▾

**Data coverage:** 100%

**Detail Settings** **Expert Settings**

## Detail Settings

**Sorting:**  ▾

**Include shared:**  ▾

**Entries desired:**

**Entries displayed:** 12

**Source items available:** 94

**Source items included:** 94

**Source items excluded:** 0

**Query duration:** 8 ms

**Diversity:**

**Rare Things:**

**Rich Media Things:**

## Expert Settings

**Concepts in diary:** 5772

**Concept index size:** 13770

**Term index size:** 25501

**Max. sim. found (weighted):** 0.90224

**Better clusters in CC:** 0

**Remove image things:**  ▾

**Use compact vectors:**  ▾

**Show cluster comp.:**  ▾

**Sim. threshold type:**  ▾

**Sim. threshold value:**

**Weight concepts:**

**Weight label terms:**

**Weight text terms:**

**Normalize sim. values:**  ▾

**Max. weight related:**

**Centroid check (CC):**  ▾

**CC sim. thr. factor:**

**Find better clusters in CC:**  ▾

**CC auto mode factor:**

**2nd Clust. Pass (2CP):**  ▾

**2CP ann. limit factor:**

**2CP #incl. ann. things:**

**Ann. limit factor:**

**Rarity appl. factor:**

**Rarity bonus:**

**Rich media bonus:**

**Top elem. in context:**

**Label terms factor:**

**Keywords per entry:**

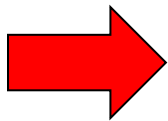
**Img. weight fav.**

**Img. weight keep/del.**

**Img. weight con. ann.:**

**Img. weight text ann.:**

**Img. weight quality:**





- **Similarity Calculation**
    - using **term vectors** for **headlines** and **text bodies**
    - using **concept vectors** for **concept annotations**
    - **Spreading Activation** to find **indirect annotations** and
    - extend concept vectors
  
  - **Clustering of similar entries**
    - also fosters **higher diversity** within the diary
  
  - **Importance evaluation**
  - **Headline Generation**
  - **Text Summarization**
- } next slides



# Importance Evaluation

## Importance evaluation of diary entries based on

- **annotation intensity**,
- presence of things having a high potential of being a **memory landmark**,
- **rarity** (idea: *rare persons/locations/etc. might be more memorable*),
- associations with **rich media**



09.08.2014 - 29.03.2014

Pizza

composite entry consisting of 4 single entries:

- Pizzaessen [pimo:thing#Note]
- Pizza [pimo:thing#Topic]
- Pizzabacken [pimo:thing#Note]
- pizzabacken.jpg [pimo:thing#Image]

importance evaluation:

- (annotations | highPrioThings | rarity | richMedia) = (1.104 | 0.699 | 0.000 | 1.000)
- importance = 2.803



27.06.2014

Spreading Activation

single entry:

- Spreading Activation [pimo:thing#Note]

importance evaluation:

- (annotations | highPrioThings | rarity | richMedia) = (0.588 | 0.699 | 1.000 | 0.000)
- importance = 2.287



## Headline Generation based on

- labels of **annotations** and **information elements**
- intra-cluster importance evaluation (similar to previous slide)
- length of viewed time period
- possibly a split label

• example:

**ForgetIT / ForgetIT WS Luleå 2014**

The screenshot shows a social media post with a group photo on the left. The main text of the post is "03.02.2014 - 19.02.2014 ForgetIT / ForgetIT WS Luleå 2014". Below this, there are several links: "ForgetIT WS Luleå 2014" (highlighted with a green box), "Reiseabrechung Lulea 2014", and "forgetit:project\_meeting\_lulea · L3S Wiki". A blue button says "and 12 more". In the top right corner, there is a small icon of a globe with a red box around it. Below the post, a "Keywords:" section lists various terms: "forgetit 2014 implementing interface calls meeting luleå lulea cmis preservation haas design manual presentation re wp11 werner wiki minutes general assembly johannes goslar forgetit:project\_meeting\_lulea l3s mydfki dienstreiseverwaltung update team luleat.jpg logistic informationa flugticket ws reiseabrechung".

**Keywords** as a summary of the entry

- $\text{weight}(\text{label terms}) > \text{weight}(\text{text body terms})$



## Early Evaluation: Setting

- PANiC:

- group of 4 participants (50% ♀ , 50% ♂)
- „PANiC“: acronym of their first names
- Industrial Engineering students
- in their last year before earning a master's degree
- **4 months** access to our **Semantic Desktop prototype**
- then testing **PIMO Diary** for **3 weeks**

- Questionnaire:

- items 1-12: **compact USE questionnaire** (Lund, 2001)
- items 13-20: **specific questions** concerning our app's **core features**
- text field to express any kind of **feedback or comments**
  
- 7-point Likert scale, each item is phrased such that: **7: best value**  
**1: worst value**



- **Overall ratings (80 items in total):**  
40x 7, 30x 6, 9x 5, 1x 4, 0x 3, 0x 2, 0x 1 → overall average rating: 6.36
- **Item 19:**  
The app allows for an appropriate and **satisfactory retrospection** on those parts of my life that are reflected by my PIMO. → item's average rating: 6.75
- **Item 20:**  
The **overall context** provides a good impression, i.e. a quick overview, of those things (reflected by my PIMO) that concerned me the most in the chosen period. → item's average rating: 6.75
- **Comments / Feedback of the PANiC group:**
  - „This program is very **innovative**, I haven't seen anything like this before.“
  - „I was surprised by its **intuitive handling** and the **quality of the results**.“
  - „Using the app was **fun**.“
  - „It's a nice add-on to the PIMO which **helps in keeping an overview**.“





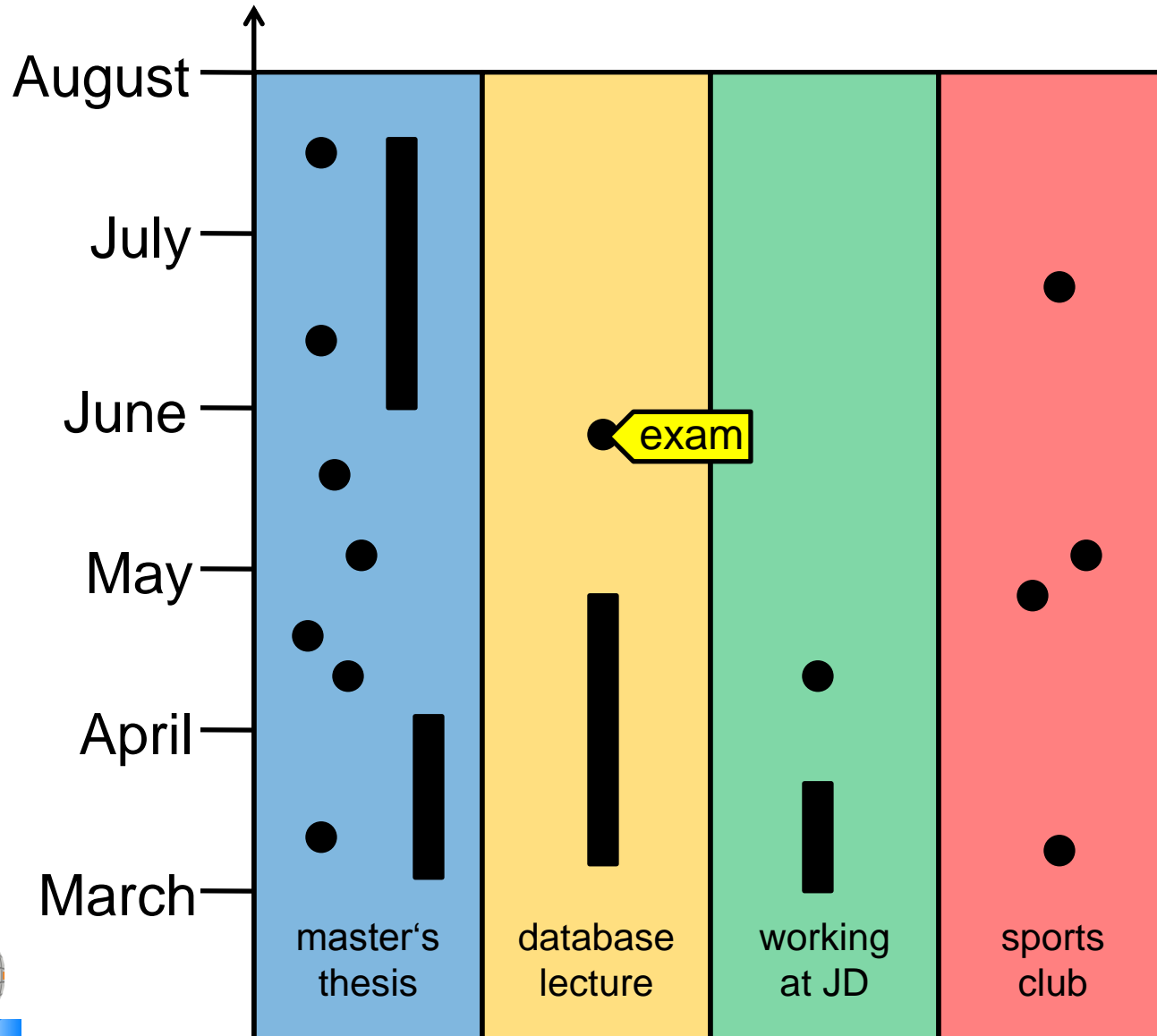
## Conclusion:

- app enabling **early contextualization**
- **supporting** and especially **easing personal retrospection**
- innovative app:
  - **self-writing diary** with **blog look & feel**
  - **diversity** to make reading more exciting
  - **zoom** in and out of **time periods**
  - **manually shift emphases** (experimental)
  - **overall context**
- promising results in a first user experience evaluation

## Open issues / outlook on possible future work:

- text **summarization using natural language** (sentences)
- things having a **time span**
- more **social media** capabilities (diary sharing)
- algorithm and parameter **tuning**
- **topic lanes**





# Thank you for your attention!



## Any questions?



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