

New Applications derived from behaviour based recommendations

EMTACL 2010 Trondheim

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Structure

What to expect?

- 1.) Brief Introduction into BibTip
- 2.) Scientific roots
- 3.) Clustering and Boosting
- 4.) Sharing of Recommendations

Simple Search Advanced search User account My list Inter lib. loan Branch library: UB Altstadt Help Exit

Back to the short title display and search display for print Categories BibTex Endnote

Availability: not available for loan Location mark: INF 3 GAM 261/1 Location: Bereichsbibl. Mathematik+ / MA-CL Copies: see below

Other Editions

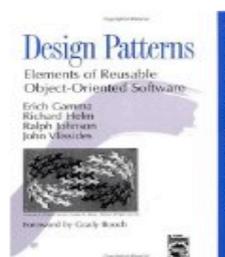
Titel: Design patterns Verf./Hrsg.: Gamma, Erich Titeltzusatz: elements of reusable object-oriented software Verf. Vorlageform: Erich Gamma ... Verlagsort: Reading, Mass. [u.a.] Verlag: Addison-Wesley ISBN: 0-201-63361-2 978-0-201-63361-0 E-Jahr: 1995 Jahr: 1995 Umfang: XV, 395 S. Illustrationen: graph. Darst. Serie/Reihe: Addison-Wesley professional computing series Sprache: eng Schlagworte: (s)Softwarewiederverwendung / (s)Objektorientierung SWB-PPN: 044290810

Kirchhoff-Institut für Physik

Signatur Inst: <HE> IP Gamma Bibliothek/Idn: HE / 59824394,6 InventarNr: 6000

Bereichsbibl. Mathematik+Informatik

Signatur Inst: INF 3 GAM 261/1 Bibliothek/Idn: MA / 60224835,3 InventarNr: 2002/H 41



Others also use:

- Design patterns / Gamma, Erich; 2008
Entwurfsmuster / Gamma, Erich; 2004
Entwurfsmuster von Kopf bis Fuß / Freeman, Eric; 2006
Applying UML and patterns / Larman, Craig; 2005
UML 2 und Patterns angewendet / Larman, Craig; 2005
Refactoring / Fowler, Martin [Hrsg.]; 2000

Provided by BibTip

Import bibliographic data in: Bibsonomy

Title in: LibraryThing Rating: 4.13 of 5 17 review(s)

Title is mentioned in Wikipedia:

- Entwurfsmuster
Objektorientierte Programmieru...

Suchergebnis

Katalog: KIT-Katalog 

Suchanfrage: find nd=12173046

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Wassermann, Emanuel

Lawinen und Risikomanagement : für Touren mit Ski, Snowboard oder Schneeschuhen ; Grundlagen, Planung, Strategien, Rettung / Emanuel Wassermann ; Michael Wicky. [Hrsg.: Bergpunkt AG - Zentrum für Alpinausbildung und Beratung]. - 2., überarb. Aufl.

Reichenbach : Ed. Filidor, 2004. - 64 S. : Ill., graph. Darst., Kt.; (deutsch)

ISBN 3-906087-22-0

Franz. Ausg. u.d.T.: Wassermann, Emanuel: Avalanches et gestion du risque

Schlagwörter: Tourenskilauf / Unfallverhütung / Lawine / Risikoanalyse

Tourenskilauf / Lawinenschutz

Anzeigeformat: [BibTex](#), [Endnote](#), [Ref.Manager](#), [MAB](#)

KIT-Bibliothek Süd

Standorte: Magazin

Signatur: 2005 B 1151



Was vielleicht auch interessant ist ...

-  [3 x 3 Lawinen / Munter, Werner , 2003](#)
-  [Powder-Guide Lawinen / Kurzeder, Tobias \[Bearb.\] , 2002](#)
-  [Skibergsteigen - Freeriding / Geyer, Peter , 2007](#)
-  [Ski-Lehrplan Style / Göhner, Ulrich , 2001](#)
-  [Wechselwirkungen zwischen Klima, Lawinen und technischen Massnahmen / Schneebeili, Martin , 1998](#)
-  [Naturkatastrophen / Niedek, Inge \[Hrsg.\] , 2004](#)
-  [Lawinen / Ammann, Walter , 1997](#)
-  [Richtig Nordic Ski / Wöllzenmüller, Franz , 2005](#)
-  [Richtig Skitouren / Winter, Stefan , 2001](#)
-  [Die schönsten Skitouren der Schweiz / Scanavino, Fabrizio , 2003](#)
-  [Skier's Fitness / Rieder, Max , 2003](#)
-  [\(Skilauf und Snowboard in Lehre und Forschung ; 11\) , 1995](#)
-  [Ski-Lehrplan perfect für fortgeschrittene Skifahrer und Carver / Held, Franz; Kaiser, Walter , 2002](#)

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From raw Data to Recommendations

How does it work?

Data Selection



Preprocessing



Pattern Mining



Deriving Recommendations



Presentation



Co-Inspections of full title views



Filter and normalize raw data



Random Noise model



Find outliers in noise



Offer links to recommended items as catalog mashup

Characteristics

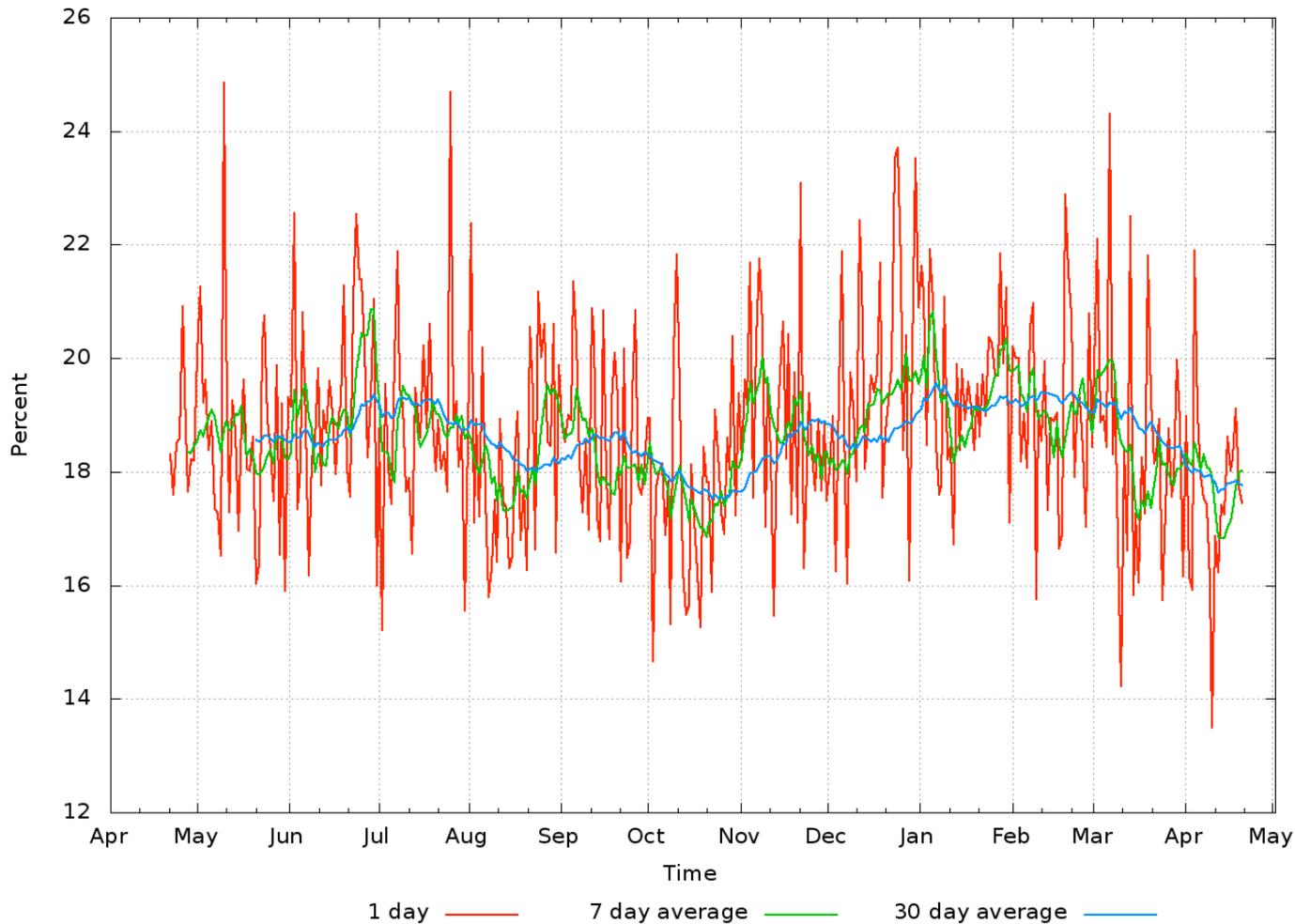
BibTip in a Nutshell

- Based on statistical analysis of co-inspections (full title views observed within the same browser session)
- Recommendations are catalogue specific and reflect local user behaviour
- Suited for any media (videos, journals, articles ...)
- Language independent
- Works without personal data --> no privacy implications
- Integrated as JavaScript Mashup into the OPAC
- Dynamic and adaptive --> never gets outdated

Usage

User acceptance at KIT library

Usage

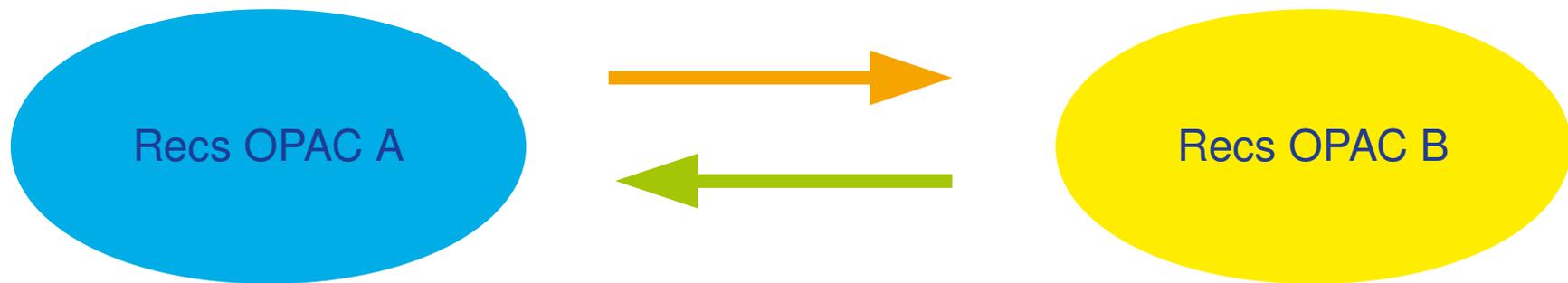


KIT BibTip figures

Coverage based on viewed titles	72%
Titles with recs	120000
Total Recs	800000
Filtered full title views (counted once per session) on a weekday	8000

Recommendation Sharing

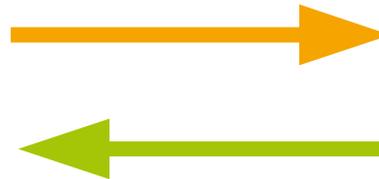
Basic idea



- ➔ **Sharing recommendations instead of pooling observations to preserve community profile of recommendations**
- ➔ **Local recs will be ranked higher in the recharts**
- ➔ **Only recs that point to titles available in the target OPAC will be shared**

Aspects of Sharing

Scenario A: Lessen cold start problem



Coverage	65%
Start of service	2 years ago
Local Recs	50000

Coverage	2%
Start of service	2 month ago
Local Recs	1500

Aspects of Sharing

Scenario B: Small community within the catalog users



Coverage	high
Main user focus	Law, Medicine, Philosophy, History, Social Science

Coverage	high
Main user focus	Engineering, Computer Science

Aspects of Sharing

Scenario C: Some fresh blood



Coverage	high
Main user focus	Engineering, Computer Science

Coverage	high
Main user focus	Engineering, Computer Science



LMU

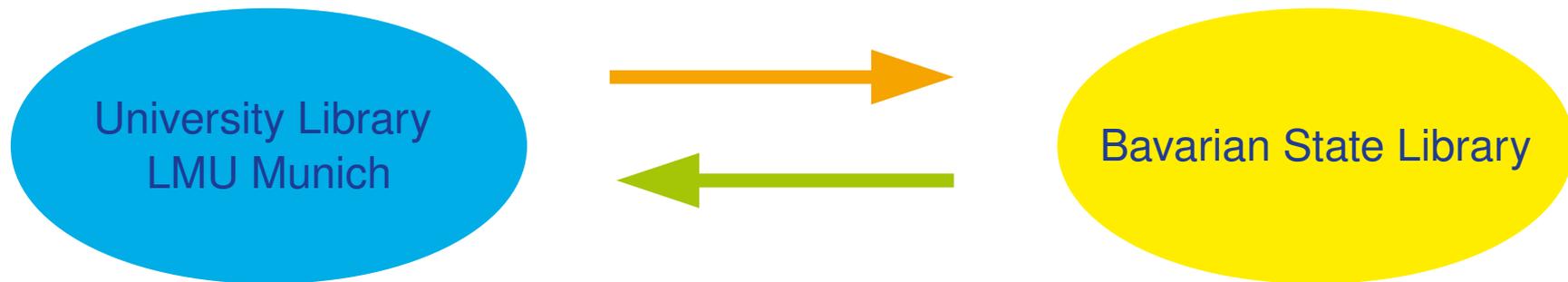


RSB



Aspects of Sharing

Scenario D: Cross references to nearby libraries



Location	Located close to BSB
BSB as cross reference library configured	YES

Location	Located close to LMU
LMU as cross reference library configured	YES

How can Sharing be helpful

From what we have learned

- Lessens cold start problem
- Recs are available even for very small communities
- Recs from other communities can be inspiring, even if lots of local recs are available
- Cross references to nearby libraries
- Activates new parts of the OPAC
 - At Heidelberg University 1200 different full title views since mid of march that originate from shared recs only

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Thank you very much