SPLURGE

Scholars Portal Library Usage-Based Recommendation Generation Engine

http://splurge.scholarsportal.info/static/index.html
http://github.com/splurge/splurge

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http://hdl.handle.net/10315/18178
The overview

- Recommendation services
- SPLURGE demonstration
- Scholars Portal Technical Advisory Group
- How recommendations are generated
- The components: database, API, widget and policies
- How we got here
- The code
- What happens next
The impetus

- Netflix
- Plumperfect.com
- Amazon
- Library Thing: BookPsychic
- BiblioCommons
- University of Huddersfield (JISC: MOSAIC)
Top Picks

Based on your personal Color Signature, these are our top color and product selections for you.
You can discover all of your recommended colors and products by selecting to see more Face, Eye, or Lip Picks

Lips

Sugar Goddess
Fresh Sugar Lip Gloss Su... $18.00
Buy

Face

Luminoso(SKU:MNB-05)
BAKED BLUSH $7.99
Buy

Eyes

Sherazade
Laura Mercier Eye Colour... $22.00
Buy
Recommender systems or recommendation systems are a subclass of information filtering system that seek to predict the 'rating' or 'preference' that a user would give to an item (such as music, books, or movies) or social element (e.g. people or groups) they had not yet considered, using a model built from the characteristics of an item (content-based approaches) or the user's social environment (collaborative filtering approaches).

Recommender systems have become extremely common in recent years. A few examples of such systems:

When viewing a product on Amazon.com, the store will recommend additional items based on a matrix of what other shoppers bought along with the currently selected item. Pandora Radio takes an initial input of a song or musician and plays music with similar characteristics (based on a series of keywords attributed to the inputted artist or piece of music). The stations created by Pandora can be refined through user feedback (emphasizing or deemphasizing certain characteristics). Netflix offers predictions of movies that a user might like to watch based on the user's previous ratings and watching habits (as compared to the behavior of other users), also taking into account the characteristics (such as the genre) of the film.

Overview

Recommender systems typically produce a list of recommendations in one of two ways - through collaborative or content-based filtering. Collaborative filtering approaches to build a model from a user's past behavior (items previously purchased or selected and/or numerical ratings given to those items) as well as similar decisions made by other users, then use that model to predict items (or ratings for items) that the user may have an interest in. Content-based filtering approaches utilize a series of discrete characteristics of an item in order to recommend additional items with similar properties. These approaches are often combined (see Hybrid Recommender Systems).

Source

Description above from the Wikipedia article Recommender system, licensed under CC-BY-SA full list of contributors here. Community Pages are not affiliated with, or endorsed by, anyone associated with the topic.
Due / Dû: 12-04-11

Due / Dû: 12-04-11

3. The French lieutenant's woman / John Fowles. --  
Due / Dû: 12-04-11

Due / Dû: 12-04-11

5. London fields.  
Due / Dû: 12-04-11

Total 5 article(s).
Elementary Linear Algebra [Hardcover]
Howard Anton (Author)

Price: $131.71. This item ships for FREE with Super Saver Shipping. Details

In Stock.
Ships from and sold by Amazon.com. Gift-wrap available.

Want it delivered Tuesday, October 16? Order it in the next 32 hours and 29 minutes, and choose One-Day Shipping at checkout. Details

FREE TWO-DAY SHIPPING FOR COLLEGE STUDENTS

Formats

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Book Description


When it comes to learning linear algebra, engineers trust Anton. The tenth edition presents the key concepts and topics along with engaging and contemporary applications. The chapters have been reorganized to bring up some of the more difficult material and the text begins with a discussion of systems of linear equations and matrix algebra. Throughout the text, the focus remains on building an intuitive grasp of mathematical concepts. Mathematical proofs are included at the end of every section for those who want to delve deeper into the material.

Frequently Bought Together

- This item: Elementary Linear Algebra by Howard Anton. Hardcover $131.71

Customers Who Bought This Item Also Bought
**Elementary Linear Algebra**

by Howard Anton

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**Members**

384

**Reviews**

1

**Popularity**

23,405

**Average rating**

⭐⭐⭐½ (3.55)

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**Recently added by**
BooksAndThings, GaussianElite, yaoxing, private library, c2c, jjmouraj, DOnnell7, GVassmer

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**Tags**

algebra, at work, B15, BOX-REF-02, course, fagbox, formal science, H-4, HC, linear algebra, math, matrices, methods, solutions manual, structural engineering, technology, textbook, textbooks, vector algebra, work

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**LibraryThing recommendations**

2. Linear Algebra and Its Applications by David C. Lay (1994)
5. Fundamentals of Physics by David Halliday (1967)
10. Div, Grad, Curl, and All That: An Informal Text on Vector

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**Member recommendations**

Add your own recommendation

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Will you like it?
The crystal ball is empty...

You must be searching for items that aren't available on the other side.
Try searching for something else.

linear algebra howard anton

You may also want to try to search directly in PPL catalog.
**Author**: Anton, Howard.

**Title**: Elementary linear algebra / Howard Anton.

**Publisher**: Hoboken, NJ : Wiley, c2010.

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**Edition**: 10th ed.

**Description**: xv, 568 p. : ill. (some col.) ; 27 cm.

**Subject**: Algebras, Linear -- Textbooks.

**ISBN**:
- 9780470458211 (cloth)
- 0470458216 (cloth)
- 9780470432051 (hbk.)
- 0470432055 (hbk.)

**Link to this record**: http://orbis.uottawa.ca/record=b3672156~S0

Send to Phone or Email
Elementary linear algebra / Howard Anton.

Main Author: Anton, Howard.

Format: Book

Language: English

Published: Hoboken, N.J. : Wiley, 2010

Edition: 10th ed.

Subject(s): Algebras, Linear » Textbooks.

Item Description: STEACIE (copy 4); lacks manual.
STEACIE (copy 5); lacks manual.

Physical Description: xvi, 773 p.: ill. (some col.); 27 cm.

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Classic Catalogue: View this record in the classic catalogue
Elementary linear algebra

by Anton, Howard

Subjects: Linear Algebra -- Mathematics

Edition: 3d ed.
Notes: Includes index.
ISBN: 0471089877

User rating: no rating yet with no comments (add your rating or your comments)

Add to my list | Request Item
The demonstration

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SPLURGE!


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Date range: between 2000 and 2020

Get recommendations
Institution(s): any

Date range: between 2000 and 2020

Get recommendations
Scholars Portal Technical Advisory Group

Created in January 2011, TAG has members from 7 institutions in the Ontario Council of University Libraries (OCUL).
Privacy and Anonymization

Privacy and Anonymization

How do you get recommendations?
Usage-based recommendations

Our Little Library:

John  Sally  Mark  Julie  Erin

Patron Records:

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Research

We Recommend:

Erin
Resource 28X
Check the records
Reduce to deduce

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</table>
Reduce to deduce
Research complete

We Recommend:
- 31B
- 18C
- 19D
- 14N
- 90V

Erin

Resource 28X
SPLURGE =

The Database

The API

The Widget

The Policy

The components
The components

The Database

- PostgreSQL
- Tables:
  - `item`
  - `transaction`
  - `institution`
  - `caches`
The components

- Python
- Flask Powered Webservice
- Client provides *isbn, institution name, and date range.*
The components

- Javascript
- Queries the API
- 'Lives' in the catalogue
- Loads covers from the OpenLibrary
The first hackfest
The second hackfest
The issues

Problem: Same Work, different Manifestations
Solution: Use xISBN, thingISBN to collapse to work level.

Solution: Same?

Problem: ISBNS don't cover everything.
Solution: Use LC numbers and OCLCnums.

Problem: Not enough data.
Solution: Get more data.
The issues

Problem: Sometimes it doesn't work.

Problem: Titles and authors are not returned.
Solution: Collect title/author data, and show it.

Problem: No unit tests.
Solution: Make unit tests.
The issues

Problem: Don't have one line of Javascript for all catalogues and OPACS.
Solution: Make the one line.

Problem: Some books don't have covers.
Solution: Make generic ones that show the title/author.

Problem: Is it fully accessible and meets WCAG 2.0?
Solution: Find out. If not, fix.

Problem: No documentation.
Solution: Documentify.

The Widget
The issues

Problem: Data is not available under open data license.
Solution: Go back to OCUL libraries, discuss, get them to resubmit.

Problem: Data is not anonymous.
Solution: Anonymize it.

Problem: Worries about usage of open service by non-OCUL people.
Solution: This is not a problem!

The Policy
The code

https://github.com/splurge/splurge

Help wanted:
- Database
- API
- Widget
- Policy

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SPLURGE

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