

# 2-3: Predictions and Recommendations

# Learning Objectives

- To understand the ways in which recommender output can be used
- To understand the distinction between predictions and recommendations
- To understand the distinction between organic and explicit presentation
- To review examples and understand which presentation makes most sense in different applications.

# Predictions

- Estimates of how much you'll like an item
  - Often scaled to match some rating scale
  - Often tied to search or browsing for specific products

Publish your reviews on Google+ Local

Start Now

**Hammacher Schlemmer**  
 Offering the Best, the Only  
 and the Unexpected Since 1848


SHOP NOW »

Welcome Joseph K | Sign Out | Help

**ZAGAT**

(restaurant name, cuisine, feature...)

(city, zip, street, neighborhood)

in

Minneapolis, MN

SEARCH



LISTS

VOTE

EVENTS

STORE

MOBILE

BLOG ↗

ZAGAT WINE ↗

ZAGAT

**La Belle Vie**

French (New), Mediterranean | Loring Park



Share Email

 510 Groveland Ave. (Hennepin Ave.)  
 Minneapolis, MN 55403  
[www.labellevie.us](http://www.labellevie.us)

612-874-6440

[Edit Info](#) | [Are You the Owner?](#)

## Make a Reservation

Date &amp; Time

06/29/2013



7:00PM

Party Size

2

FIND A TABLE

## ZAGAT RATINGS &amp; REVIEW

[KEY TO RATINGS](#)

FOOD

29

DECOR

27

SERVICE

29

COST

\$84

"Just close your eyes" and pick any of the "modern", "exquisite" Med-New French dishes (or go for the "brilliant" tasting menu) at this "wonderful little gem" in Loring Park, "top of the heap when it comes to fine dining", complete with a "formal look" in a "grande dame of an old apartment building", and earning the Twin Cities' No. 1 score for Service ("phenomenal"); sure it's a "splurge", so "bring your best credit card" and get set for a "memorable" evening; P.S. the "gorgeous" bar is "less stuffy" with a more affordable menu.

## STATS

# OF REVIEWS: 264  
 FRENCH (NEW) RANK: 1 of 2  
 LORING PARK RANK: 1 of 4  
 MEMBERS BEEN HERE: 15  
 MEMBER FAVORITES: 8

## ADD TO LISTS

Been Here

Favorites

Wish List

Custom Lists ▼

OVERVIEW

REVIEWS

MENU

PHOTOS

PLAN YOUR VISIT

## MEMBER REVIEWS

EDIT YOUR REVIEW

[See Reviews From Other Publications](#)

My wife and I treated ourselves to dinner at La Belle Vie for our wedding anniversary and it was a treat. We went with one of the tasting menus and it was a memorable meal!

Published June 21, 2012



Steve E

 164 Reviews  
 Bloomington  
 Member since:  
 Nov. 1999

## GOOD TO KNOW

ATMOSPHERE Transporting Experience

 FEATURES  
 Game Served  
 Private Room Available  
 Winning Wine List

MEALS Dinner Served

 SIGNATURE DISHES  
 Beef Tenderloin  
 Roasted Poussin

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# The Camera Never Lies

Dr Emmett Sullivan

Film, images & historical interpretation in the 20th century for those who have a general interest in photojournalism, and films based on historical events.

**Workload:** 5-10 hours/week



## Sessions:

Jun 24th 2013 (6 weeks long)

Enroll for Free

Enroll in Signature Track



Future sessions

Add to Watchlist

536

202

3.6k

Tweet

+1

Like

## About the Course

This short course is an introduction to use of photographs as historical evidence in the twentieth century, issues of authenticity and manipulation, and the place of film and historical adoptions as public history.

## Course Syllabus

Week 1: The Camera Never Lies - Introduction

Week 2: Images and History in the Twentieth Century

Week 3: The Air-Brushing of History: Stalin and Falsification

Week 4: Photojournalism, Authenticity and Matters of Public Acceptability - The Battle of Mogadishu

Week 5: The Power of the Image - Mount Suribachi, 1945

Week 6: From Page to Screen - Film as Public History

## About the Instructor



**Emmett Sullivan**

University of London  
International Program...

Shortcuts

Search

Basic Search

Title:

All Genres  All Dates

Domain: All movies

Tag:

- ☐ Use selected buddies!  
☐ Exclude your ratings  
☐ Exclude movies without predictions

Select Buddies

- ☐ Dan C.  
☐ Yan Chen  
☐ John  
☐ herlocke@cs.umn.edu

[What are buddies?](#)

Advanced Search

Member Search

Saved Searches

- [budy-new-comedy](#)
- [complex-hanks](#)
- [New Drama](#)

There are **45** movies matching your search:

Movies starring: **tom hanks**

You've sorted by: **Titles**

[Show Printer-Friendly Page](#) | [Download Results](#) | [Permalink](#) | [Suggest a Title](#)

Tags Related to Your Search: [Tom Hanks \(546\)](#), [Pixar \(151\)](#), [World War II \(85\)](#), [animation \(84\)](#), [true story \(74\)](#), ([about tags](#))

Page 1 of 2

**1** 2 next

Skip to page #:

Prediction or Rating ↕	Your Rating	Movie Information	Wish List
★★★	Not seen <input type="button" value="v"/>	<a href="#">'burbs, The (1989)</a> DVD info   imdb   flag   Movie Tuner	<input type="checkbox"/>
		Comedy	
		[add tag] Popular tags: <a href="#">suburbia</a>   <a href="#">thriller</a>   <a href="#">Tom Hanks</a>	
★★★★	Not seen <input type="button" value="v"/>	<a href="#">Angels &amp; Demons (2009)</a> DVD info   imdb   flag   Movie Tuner	<input type="checkbox"/>
		Crime, Drama, Mystery, Thriller - <a href="#">Italian</a> , <a href="#">Latin</a> , <a href="#">English</a>	
		[add tag] Popular tags: <a href="#">based on a book</a>   <a href="#">action</a>   <a href="#">Tom Hanks</a>	
★★★★★	Not seen <input type="button" value="v"/>	<a href="#">Apollo 13 (1995)</a> DVD info   imdb   flag   Movie Tuner	<input type="checkbox"/>
		Adventure, Drama, IMAX	
		[add tag] Popular tags: <a href="#">based on a true story</a>   <a href="#">based on a book</a>   <a href="#">space</a>	
★★★	Not seen <input type="button" value="v"/>	<a href="#">Bachelor Party (1984)</a> DVD info   imdb   flag   Movie Tuner	<input type="checkbox"/>
		Comedy	
		[add tag] Popular tags: <a href="#">Nudity (Topless)</a>   <a href="#">Betamax</a>   <a href="#">Neal Israel</a>	
★★★★★	Not seen <input type="button" value="v"/>	<a href="#">Band of Brothers (HBO) (2001)</a> DVD info   imdb   flag   Movie Tuner	<input type="checkbox"/>
		Action, Adventure, Drama, War	
		[add/edit] Your tags: <a href="#">Tom Hanks</a> , <a href="#">true story</a> , <a href="#">based on a book</a>	
		Popular tags: <a href="#">friendship</a>   <a href="#">action</a>   <a href="#">World War II</a>	
★★★★	Not seen <input type="button" value="v"/>	<a href="#">Beyond All Boundaries (2009)</a> info   imdb   flag   Movie Tuner	<input type="checkbox"/>
		Documentary, War	
		[add tag] Popular tags: <a href="#">4d</a>   <a href="#">World War II</a>   <a href="#">short film</a>	
★★★★	Not seen <input type="button" value="v"/>	<a href="#">Big (1988)</a> DVD VHS info   imdb   flag   Movie Tuner	<input type="checkbox"/>
		Comedy, Drama, Fantasy, Romance	
		[add tag] Popular tags: <a href="#">comedy</a>   <a href="#">coming of age</a>   <a href="#">Tom Hanks</a>	
★★★	Not seen <input type="button" value="v"/>	<a href="#">Bonfire of the Vanities (1990)</a> DVD info   imdb   flag   Movie Tuner	<input type="checkbox"/>
		Comedy, Crime, Drama	
		[add tag] Popular tags: <a href="#">Morgan Freeman</a>   <a href="#">Bruce Willis</a>   <a href="#">Tom Hanks</a>	
★★★★	Not seen <input type="button" value="v"/>	<a href="#">Cast Away (2000)</a> DVD VHS info   imdb   flag   Movie Tuner	<input type="checkbox"/>
		Drama	

# Recommendations

- Recommendations are suggestions for items you might like (or might fit what you're doing)
  - Often presented in the form of “top-n lists”
  - Also sometimes just placed in front of you



Google

konstan



konstan@umn.edu

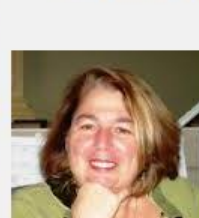
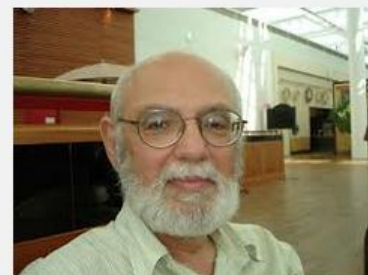


+ Share



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Safe Search





movielens

www.movielens.org/advSearch

☒ Restrict to movies found in

☐ Any ☒ All of the following selected

Genres

☐ Action ☐ Drama ☒ Sci-Fi

☐ Adventure ☐ Fantasy ☐ Thriller

☐ Animation ☐ Film-Noir ☐ War

☐ Children ☐ Horror ☐ Western

☐ Comedy ☐ Musical ☐ IMAX

☐ Crime ☐ Mystery

☐ Documentary ☐ Romance

☐ Restrict to movies NOT found in the following selected

Genres

☐ Action ☐ Drama ☐ Sci-Fi

☐ Adventure ☐ Fantasy ☐ Thriller

☐ Animation ☐ Film-Noir ☐ War

☐ Children ☐ Horror ☐ Western

☐ Comedy ☐ Musical ☐ IMAX

☐ Crime ☐ Mystery

☐ Documentary ☐ Romance

☒ Restrict To Language:

☒ English ☐ All Non-English

☐ Cantonese ☐ Italian ☐ Portugese

☐ Dutch ☐ Japanese ☐ Russian

☐ French ☐ Korean ☐ Silent

☐ German ☐ Mandarin ☐ Spanish

☐ Hindi ☐ Polish ☐ Swedish

☐ Other:

☒ Restrict to Movies with release Date (for whichever format is selected)

☐ Within the Last 90 Days ☒ In the range

From  To

☐ Restrict To: ☐ Your Ratings ☐ Your HiddenList ☐ Your WishList

☐ Restrict To Format: ☐ DVD ☐ VHS

☒ Don't Show Predictions!

☐ Include Movies I've Already Rated!

Sort By:

☐ Prediction or Rating ☒ Prediction ☐ Title ☐ Number of Ratings ☐ Release Date ☐ Random ☐ Date Added ☐ Date of Rating Sort ☐ Title Similarity

Search! Reset

How to use advanced search?

About Movielens | Published Research | Privacy Policy | Acceptable Use | Contact Us

**Shortcuts**

**Search**

**Basic Search**

Title:

Sci-Fi  All Dates

Domain: All movies

Tag:

- ☐ Use selected buddies!  
☒ Exclude your ratings  
☐ Exclude movies without predictions

**Search!**

**Select Buddies**

- ☐ Dan C.  
☐ Yan Chen  
☐ John  
☐ herlocke@cs.umn.edu

[What are buddies?](#)

**Advanced Search**

**Member Search**

**Search!**

**Saved Searches**

- [budy-new-comedy](#)
- [complex-hanks](#)
- [New-Drama](#)

There are **849** movies matching your search:  
 You've searched for movies with these languages: **English**  
 Movies with genres matching ALL of : **Sci-Fi**  
 Movies released in: **1970 -- 2013**  
 Movies you've rated are **Not Shown**  
 You've sorted by: **Prediction**

[Show Printer-Friendly Page](#) | [Download Results](#) | [Permalink](#) | [Suggest a Title](#)

Tags Related to Your Search: [sci-fi \(2339\)](#), [dystopia \(1168\)](#), [aliens \(994\)](#), [time travel \(854\)](#), [action \(768\)](#), [\(about tags\)](#)

Page 1 of 34

[1](#) [2](#) [3](#) [4](#) ... [34](#) [next](#)

Skip to page #:

**Go**

Prediction or Rating ↕	Your Rating	Movie Information	Wish List
???	<input type="button" value="v"/> Not seen	<a href="#">Minority Report (2002)</a> <a href="#">DVD</a> <a href="#">info</a> <a href="#">imdb</a> <a href="#">flag</a> <a href="#">Movie Tuner</a>	<input type="checkbox"/>
		Action, Crime, Mystery, Sci-Fi, Thriller	
		<a href="#">[add tag]</a> Popular tags: <a href="#">post-apocalyptic</a>   <a href="#">sci-fi</a>   <a href="#">dystopia</a>	
???	<input type="button" value="v"/> Not seen	<a href="#">Spider-Man (2002)</a> <a href="#">DVD</a> <a href="#">info</a> <a href="#">imdb</a> <a href="#">flag</a> <a href="#">Movie Tuner</a>	<input type="checkbox"/>
		Action, Adventure, Sci-Fi, Thriller	
		<a href="#">[add tag]</a> Popular tags: <a href="#">Action</a>   <a href="#">comic book</a>   <a href="#">superhero</a>	
???	<input type="button" value="v"/> Not seen	<a href="#">Inception (2010)</a> <a href="#">DVD</a> <a href="#">info</a> <a href="#">imdb</a> <a href="#">flag</a> <a href="#">Movie Tuner</a>	<input type="checkbox"/>
		Action, Crime, Drama, IMAX, Mystery, Sci-Fi, Thriller	
		<a href="#">[add tag]</a> Popular tags: <a href="#">alternate reality</a>   <a href="#">psychology</a>   <a href="#">surreal</a>	
???	<input type="button" value="v"/> Not seen	<a href="#">V for Vendetta (2006)</a> <a href="#">DVD</a> <a href="#">info</a> <a href="#">imdb</a> <a href="#">flag</a> <a href="#">Movie Tuner</a>	<input type="checkbox"/>
		Action, IMAX, Sci-Fi, Thriller	
		<a href="#">[add tag]</a> Popular tags: <a href="#">social commentary</a>   <a href="#">sci-fi</a>   <a href="#">dystopia</a>	
???	<input type="button" value="v"/> Not seen	<a href="#">Spider-Man 2 (2004)</a> <a href="#">DVD</a> <a href="#">info</a> <a href="#">imdb</a> <a href="#">flag</a> <a href="#">Movie Tuner</a>	<input type="checkbox"/>
		Action, Adventure, IMAX, Sci-Fi	
		<a href="#">[add tag]</a> Popular tags: <a href="#">action</a>   <a href="#">comic book</a>   <a href="#">superhero</a>	
???	<input type="button" value="v"/> Not seen	<a href="#">Prestige, The (2006)</a> <a href="#">DVD</a> <a href="#">info</a> <a href="#">imdb</a> <a href="#">flag</a> <a href="#">Movie Tuner</a>	<input type="checkbox"/>
		Drama, Mystery, Sci-Fi, Thriller	
		<a href="#">[add tag]</a> Popular tags: <a href="#">based on a book</a>   <a href="#">twist ending</a>   <a href="#">nonlinear</a>	
???	<input type="button" value="v"/> Not seen	<a href="#">Iron Man (2008)</a> <a href="#">DVD</a> <a href="#">info</a> <a href="#">imdb</a> <a href="#">flag</a> <a href="#">Movie Tuner</a>	<input type="checkbox"/>
		Action, Adventure, Sci-Fi - <a href="#">English</a> , <a href="#">Persian</a>	
		<a href="#">[add tag]</a> Popular tags: <a href="#">comic book</a>   <a href="#">sci-fi</a>   <a href="#">superhero</a>	
???	<input type="button" value="v"/> Not seen	<a href="#">Star Trek (2009)</a> <a href="#">DVD</a> <a href="#">info</a> <a href="#">imdb</a> <a href="#">flag</a> <a href="#">Movie Tuner</a>	<input type="checkbox"/>
		Action, Adventure, IMAX, Sci-Fi	
		<a href="#">[add tag]</a> Popular tags: <a href="#">time travel</a>   <a href="#">sci-fi</a>   <a href="#">space</a>	
???	<input type="button" value="v"/> Not seen	<a href="#">X-Men (2000)</a> <a href="#">DVD</a> <a href="#">info</a> <a href="#">imdb</a> <a href="#">flag</a> <a href="#">Movie Tuner</a>	<input type="checkbox"/>

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## Top Selling Phone & Accessories

### Top Selling Smartphones



Samsung Galaxy  
Note II White 3G



Samsung Galaxy  
Note II Gray 3G



BlackBerry Z10  
16GB Black 3G



Samsung Galaxy S3  
16GB White 3G



Sony Xperia ZL  
Black 4G LTE



Samsung Galaxy S3  
16GB Blue 3G



Sony Xperia ZL  
Black 3G



Samsung Galaxy S3  
16GB Black



LG Nexus 4 Black  
3G



Sony Xperia Z Black  
4G

### Top Unlocked Budget Phones



Sony Xperia Tipo  
Black 3G



HTC Desire A Brown



Motorola XT532  
Silver



LG Optimus L3  
Black



Nokia 100 Black



Blu Samba JR Light  
Blue



LG Rumour Plus  
Blue 3G



Samsung Eternity II  
Blue 3G



Blu Jenny  
Black/Blue



Pantech Link Wine

### Newest Unlocked Phones



Samsung Galaxy S4  
16GB White 3G



Samsung Galaxy S4  
16GB Black 3G



Sony Xperia ZL  
16GB Black 4G LTE



Sony Xperia ZL  
16GB Black 3G



Sony Xperia Z 16GB  
Black 4G



BlackBerry Z10  
16GB Black 3G



BlackBerry Z10  
16GB Black 3G LTE



LG Nexus 4 16GB  
Black 3G



LG Nexus 4 8GB  
Black 3G



Nokia Lumia Black  
3G

- ☐ New software
- ☐ Keeping up with friends and family
- ☐ Special occasions
- ☐ Price drops

Vote ▶

Results ▶

## Ads by Google (2)

[Cheap Unlocked Phones@\\$37](#)

Latest **Unlocked**  
Quadband Cellphones  
From \$37. Huge  
Range+Free Shipping  
[www.everbuying.com/Unlocked\\_Phones](http://www.everbuying.com/Unlocked_Phones)

[Unlocked Android Phone](#)  
Bestselling **Unlocked**  
Android Phones Low  
Price, Fast Shipping. Buy

# Prediction and Recommendation

- Often, the two come together
- Predictions:
  - Pro: helps quantify item
  - Con: provides something falsifiable
- Recommendations
  - Pro: provides good choices as a default
  - Con: if perceived as top-n, can result in failure to explore (if top few seem poor)



## COMPOSE

Inbox

Sent Mail

Drafts (23)

Spam (514)

#todo

▾ Academic-Admin

SocComp

▾ CHI 2012

E-mail

Keynote

To Do

▾ Classes

CSci 1001

▾ CSci 5115

Project-Cont...

CSci 5116

▸ CSci 5125 (399)

CSci 5129

▸ CSci 8001 (5)

▸ CSci 8115 (2)

▸ CSci5115

e-Pub-Health

PhD

recsys

SEng5115-S04

SW5115-F00

Tutorials



Search people...

■ D Singer

● Ed H. Chi

■ Ellen Konstan

■ Paul Resnick

Joseph A. Konstan,

Are you looking for something in our Ice Makers department? If so, you might be interested in these items.

## Ice Makers

[NewAir AI-100R 28-Pound Portable Ice Maker, Red](#)  
by NewAir

List Price: \$271.36

Price: \$187.98 ✓Prime

You Save: \$83.38 (31%)

[Learn more](#)[Add to Wish List](#)[Portable Stainless Steel Ice Maker With Digital Display](#)  
by EdgeStar

Price: \$140.05

Ships from and sold by CompactAppliance.

[Learn more](#)[Add to Wish List](#)[Polar PIM10BLS Stainless Steel Portable Ice Maker](#)  
by Greenway Home Products

List Price: \$179.99

Price: \$177.27 ✓Prime

You Save: \$2.72 (2%)

[Learn more](#)[Add to Wish List](#)[Sunpentown IM-101S Portable Ice Maker with LCD with Stainless Steel...](#)  
by Sunpentown

List Price: \$349.99

Price: \$235.00 ✓Prime

You Save: \$114.99 (33%)

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SHOES

CLOTHING

BAGS &amp; HANDBAGS

AT HOME

BEAUTY

ACCESSORIES

SHOP BY...

WOMEN'S

MEN'S

KIDS'

ALL DEPARTMENTS

ALPHABETICAL BRAND INDEX

# • A • B • C • D • E • F • G • H • I • J • K • L • M • N • O • P • Q • R • S • T • U • V • W • X • Y • Z

*"Men Shoes" we found 360 items!*

Sort By Relevance

NARROW YOUR CHOICES

YOUR SELECTIONS:

ATHLETIC

SHOES

MEN

10

EE

Shop All  
SALE ITEMS

SHOW SALE ITEMS

MEN'S SIZE

3.5 4 4.5 5 5.5  
6 6.5 7 7.5 8  
8.5 9 9.5 10 10.5  
11 11.5 12 12.5 13  
13.5 14 15 16 17  
18

MEN'S WIDTH

N M W WW 2A  
B D E EE 3E  
4E 6E

CATEGORY

Sneakers & Athletic Shoes (223)  
Boots (127)  
Sandals (10)  
Cloos & Mules (2)



**ASICS**  
GEL-Nimbus® 15  
\$145.00



**New Balance**  
MX797v2  
\$84.95



**New Balance**  
MX797v2  
\$84.95



**New Balance**  
MX797v2  
\$84.95



**ASICS**  
GT-1000™  
\$110.00



**ASICS**  
GT-1000™  
\$110.00



**Nike**  
Air Pegasus+ 29  
\$110.00



**Brooks**  
Adrenaline™ GTS 13  
\$110.00

# Another dimension to consider

- How explicit is the prediction or recommendation (vs. organic)?
  - Historical note: we paid for it, we'll let you know
  - Today: balance between explicit prediction (falsifiable) and coarser granularity (you might like this!)
  - Today: balance between theses are the best (top-n) and softer presentation (here are some that might be interesting)

# You should now understand

- Difference between prediction and recommendation
- Range of explicit to organic for both predictions and recommendations
- Advantages and disadvantages in both dimensions.

# 2-3: Predictions and Recommendations