

Oh The Places You'll Share: An Affordances-Based Model of Social Media Posting Behaviors

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Motivation



People now use multiple Social Network Sites (SNS). Researchers are interested in:

- Audience Management
- Multiple Personae
- Newsfeed Aggregation across SNSs

Missing:

A model of multi-SNS posting that can augment and personalize SNS experience

Solution:

Apply affordance theory from prior work to build a model of how people decide which SNSs to use when posting content

Methods

Usage is inherently tied to the **affordances** (perceived utilities) provided by site features. From prior work, SNS affordances are:

- Visibility
- Persistence
- Editability
- Association

Our Survey (N=674):

Scenario: You read the latest book by your favorite author and want to share your opinion of it. Please answer the following questions keeping this scenario in mind.

- Which of the following media would you use to post something to your social network(s) for this scenario?
 - Text
 - Image
 - Video
 - Link
 - Other (Please Specify) _____
 - I would not post anything for this scenario
- What would be the ideal audience size with whom you would share the post?
 - Small
 - Medium
 - Large
 - I would not post anything for this scenario
- How are you connected with the people with whom you would share the post?
 - Friends that you knew in-person first
 - Family
 - Professional Connections
 - People you met online
 - People you don't know at all
 - Other (Please Specify) _____
 - I would not post anything for this scenario
- How would you select the people with whom you would share the post? Would you select:
 - Specific individuals relevant for this scenario
 - A predefined, custom list of people from your social network
 - Everyone in your social network
 - Public
 - Other (Please Specify) _____
 - I would not post anything for this scenario
- Would you want the post to automatically disappear from your page after a certain amount of time?
 - Yes
 - No, but this is something I might delete on my own after some time
 - No, I would be okay with this being available permanently
 - Other (Please Specify) _____
 - I would not post anything for this scenario

Part 1 - Desired Affordances

+ Part 2 (same questions asked for each SNS people used) – Anticipated Affordances



< Desired Affordances, Anticipated Affordances for SNS1 >
< Desired Affordances, Anticipated Affordances for SNS2 >
< Desired Affordances, Anticipated Affordances for SNS3 >

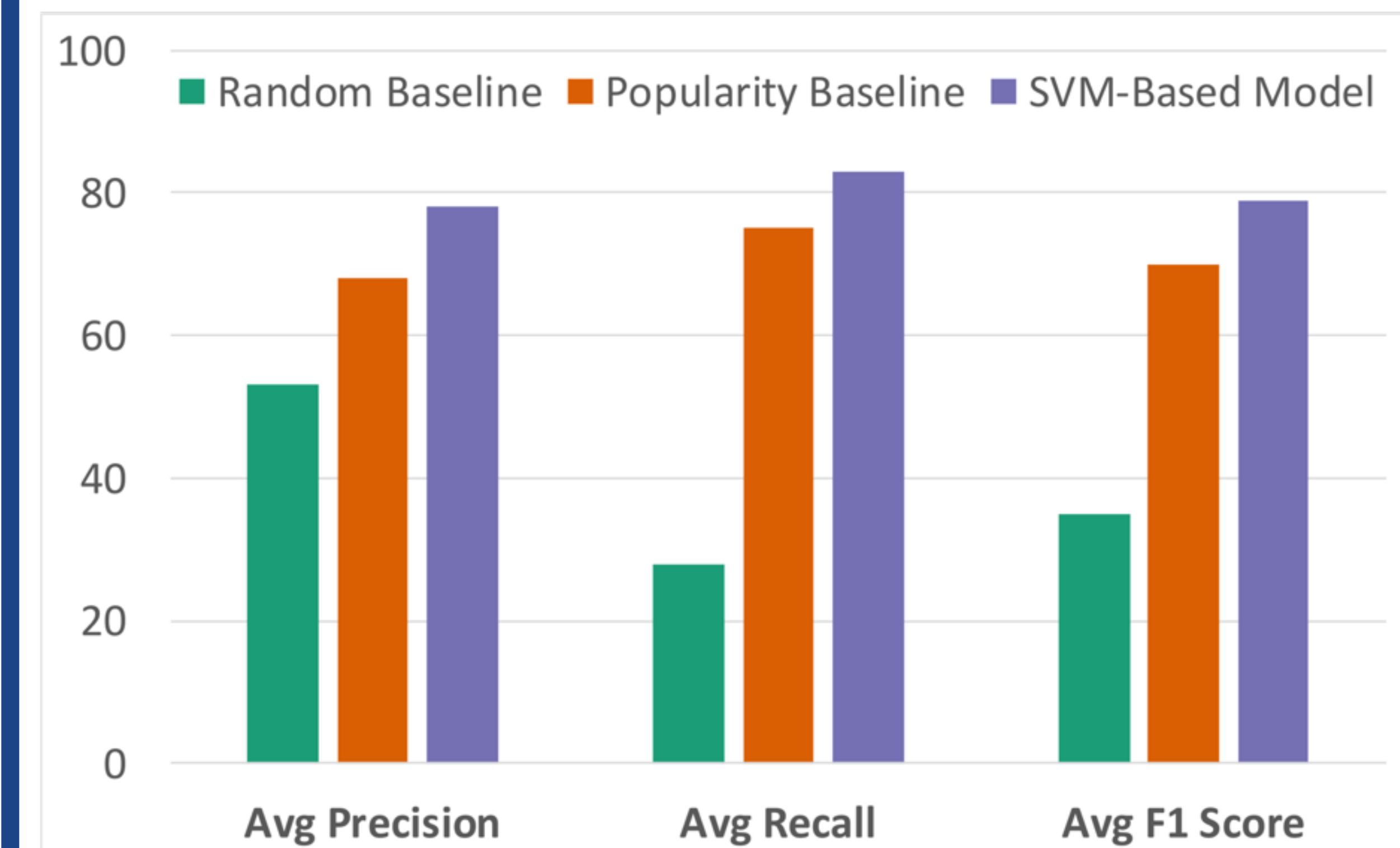
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Feature Vectors for Model

Results

Popularity Baseline: selects top 50% SNSs for posting based on a global popularity ranking of all SNSs in the participant data

SVM-Based Model: selects SNSs for posting using an SVM classifier, given the feature vectors with both desired and anticipated affordances



Human vs. Automated Approaches

- Humans apply cognitive heuristics to simplify decision-making
- Automated approaches can offload this effort of selecting SNSs
- Posting control remains with people; automated approaches act as “critics”

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