Experience Analytics: Developing a Scalable, Implicit and Rich Measure of User Experience

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The Need for Improved UX Measures

Traditional measures are prohibitive in time and cost

Validity can be subject to question
Experience Analytics

We propose research into a scalable and implicit technology enabling reliable and detailed prediction of rich UX

- Behavioral Data
  - Site Activity Traces
  - Cursor Tracking
  - Social Data
  - etc...

- User Experience
  - Measured by:
    - Self-report
    - User actions
    - etc...

Pattern Recognition & Classification
Simple web analytics are not sufficient predictors
  ➔ So, use machine learning to find patterns in behavior

Related studies show promise in this area
  ➔ User satisfaction predicted from web search
  ➔ Emotional state predicted from keystrokes
Building a New Measure

What types of input will be useful?

➔ Scalable
➔ Implicitly collected
➔ Rich with meaning

Behavior traces meet all three criteria
➔ What to collect?
What techniques to use to make experiential predictions?

➔ Explore behavior within system and task contexts
➔ Classification algorithms are a useful starting point

What components of experience do we predict?

➔ Satisfaction
➔ Engagement
➔ Emotion
➔ Intent
➔ Behavior

Validating Our New Measure

By comparing our model of behavior to survey results
  ➔ QUIS initially

Vary types of measure
  ➔ Applications
  ➔ Interface Types
Questions?

References: