Non-Temporal Interfaces

- Value the importance of exposing metadata in the context of personal information

Temporal Interfaces

- Value the change of personal information over time

Personal Search Gadget

- Targets emerging novel material over time

Overview

Stuff I've Seen (SIS)

- Provides unified access to information a person has seen, regardless of where it came from
- Focused more on System Infrastructure than UI

Phlat

- Personal Information VS Web searching
- Combines keyword and property-value search
- Focused on UI rather than system infrastructure
- UI composed of 3 main areas:
  - Query Area
  - Filter Area
  - Results Area
Overview

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Personal Visualization and Temporality

- Showing richer temporal information can be useful in the context of personal content
- Research Approaches:
  - LifeLines
  - LifeStreams
  - Milestones
  - Soylent
  - Themail
  - Personal Narratives

LifeLines

- Technique for visualizing summaries of personal histories
- Benefits:
  - Reduce chances of missing information
  - Facilitate the spotting of anomalies and trends
  - Streamline the access to details
  - Remain simple and tailor able to various applications
- Personal History is presented in a single screen. Facets are regions of the screen. Aspects are lines. Periods correspond to changes along the line, and discrete Events are marked by icons.

LifeStreams

- Time-ordered stream of documents functioning as a diary of the user’s electronic life
- Replaces conventional files and directories

Milestones

- Time-ordered stream of documents functioning as a diary of the user’s electronic life
- Replaces conventional files and directories
Milestones

- Prototype providing an interactive visualization of results output by SIS
- Visualization provides both overview and detail:
  - Overview Timeline (time flows from top to bottom)
  - Date and Landmark information
  - Detailed Portion: time last modified, doc type, and doc name
- Types of Landmarks:
  - Public: Holidays, News Headlines
  - Personal: Calendar Appointments, Digital Photographs

Soylent

- Hypothesis: Patterns of contact and collaboration leave electronic traces
- Soylent was designed as an infrastructure for examining, visualizing, and inspecting these traces
- Gathers information from archived email record headers
- Visual tools designed to highlight temporal and social structure in stored communication
- Two main views:
  - Network Diagram: shows social structure
  - Top Ten List: shows temporal structure (long-term changes in interaction)

Network Diagram Example: Author’s email connections

Different types of patterns arise:
- Onion Pattern (central role)
- Nexus Pattern (multiple roles)
- Butterfly Pattern (dual roles)

Monthly Top Ten List Example:

Themail

- Hypothesis: Visualization of email content constitutes meaningful portraits of people’s relationships
- Themail is a typographic visualization of an individual’s email content over time
- Relies on content of messages, instead of header information to build visual display of interactions
- Displays multiple layers of information, each encoding a different content-parsing technique

Yearly (background) and monthly (foreground) words are arranged in columns, with the time displayed at the bottom of each column
Temporal Interfaces

Narratives

Example: History of the primary run for presidency by Barack Obama

Temporal Interfaces

Narratives

- Interface that presents trends in keywords over time
- Visualizes change in number of blog entries posted on news topics over time
- Maintains broad selection of correlation types:
  - Date-based correlation
  - Numerical correlation
  - Most-correlated terms
  - Dependant correlation

Temporal Interfaces

Revision of Narratives

- Visualize the number of references to query terms over time

Example: Personal Narratives, searching for the term "techfest"

Personal Search Gadget

- Monitors user’s desktop index looking for material relative to a background model
- Looks for statistically unusual terms that have recently emerged

Temporal Interfaces

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Personal Search Gadget

Conclusion

- These Social and Temporal perspectives can be useful in the context of personal info
- Limitations of content parsing:
  - Weight Assignments
  - Granularity

Thank You

Questions?