mailVis: Visualizing Emailbox for Re-finding Emails
Barış Serim, Vuong Thanh Tung, Tuukka Ruotsalo, Luana Micallef, Giulio Jacucci

Email display area shows the textual content of selected emails in chronological order.

Timeline visualization area represents emails as circles, organized under different time periods. (Time periods are represented as grey rectangles)

Query field area shows the current search criteria

Active tag shows the tag the user is pointing to.

Active selection is coordinated between the two views using circles.

Months can be pointed to navigate in time

Keyword or contact tags can be dropped on a month for querying within a time period.

‘Older’ and ‘newer’ navigation buttons.

Contact and keyword tags are created using term frequency inverse document frequency (tf-idf)

Natural language processing is used for extracting keywords from the email body.

VISUAL NOTATION

Email structure

Search session related information

SELECTION METHODS

Direct selection

Pointing to tags

FILTER SWIPE

Filter swipe combines filtering and selection into a single action, by enabling the use of filtering criteria as a spatial selection object. The action is achieved by dragging a tag, on the visualized data set. Only related items are selected, avoiding the multistep first-filter-than-select process.

Different visual elements are highlighted, depending on whether the tag that the user interacts with is the sender, co-recipient or the keyword of an email.