

Introduction of TAKAMA Lab Research Topics 2008

Interactive
Information
Visualization

Web
Intelligence

Data Mining

Social Data
Analysis

Trend
Information
Analysis

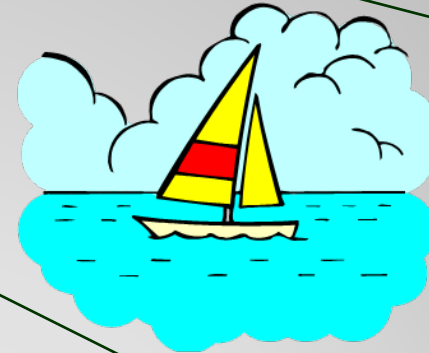
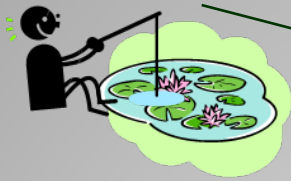
Information
Recommendation

Anticrime /
Disaster
Prevention

Partner Robot

Keywords

Recent growth of
computers, Web,
Internet



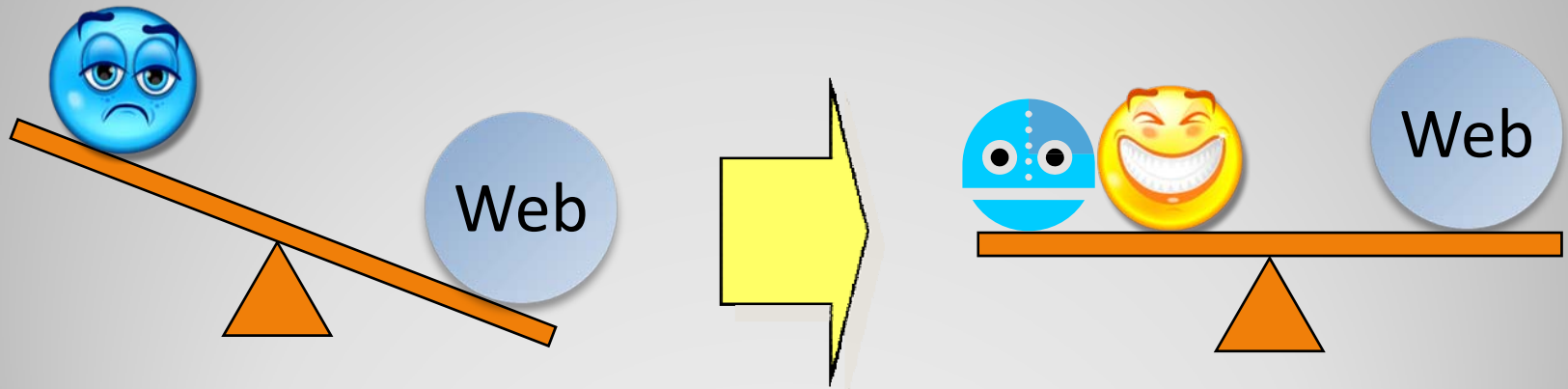
Expert

User

Ordinary people

**Increasing Gap between
User and Information Space**

- Bridging gap between user and Web
 - Information visualization
 - Interactive systems

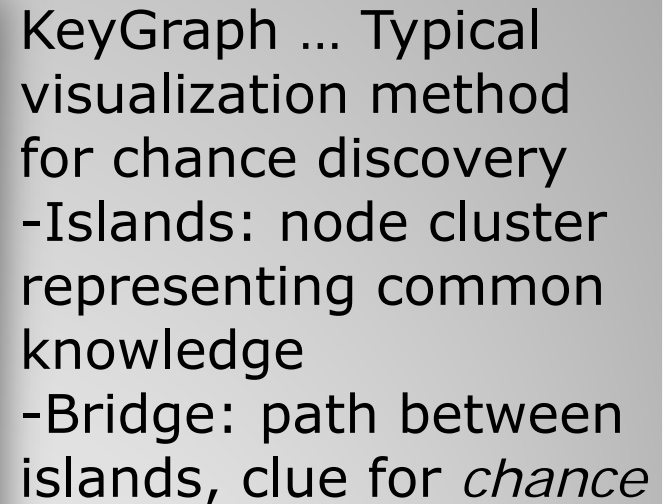


Role of Intelligent Interface

- Data analysis as collaborative work
 - Deeper understanding & exploration of data space
 - Visualization as common ground for communication



KGBBS: Online Discussion Support for Chance Discovery



Support 2 kinds of anticrime activities

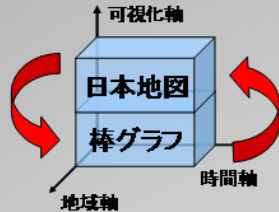
- Creation of Community Safety Map by Children
- Online discussion by community residents

The screenshot shows a web application interface for community anticrime activities. On the left, there is a '引用ボックス' (Quote Box) with a 'スポット:元木小学校' (Spot: Motoki Elementary School) and a '削除' (Delete) button. The main area displays a map with various icons (eyes, hearts, and faces) indicating different spots. A pop-up window for '元木小学校' (Motoki Elementary School) is shown, featuring a photo of the school and text: '校庭は広く見えやすい。高いフェンスがあるので入りにくい。' (The schoolyard is easy to see from a wide angle. It has a high fence, so it's difficult to enter.) and a 'BBSで引用' (Quote on BBS) button. On the right, there is a 'BBS' section with a 'スポット一覧' (Spot List) tab. It includes a 'メッセージ検索' (Message Search) bar, a 'マップ表示領域に限定' (Limit to map display area) checkbox, and a '反映' (Reflect) button. Below this is a '全メッセージ表示' (Display all messages) link and a 'スレッド一覧' (Thread List) section. A new thread titled '校庭' (Schoolyard) is shown, with a message from an anonymous user dated 2007/11/26 10:38:01, stating: 'スポット:元木小学校 校庭は見通しがよいので安心できますね。' (Spot: Motoki Elementary School. The schoolyard has good visibility, so I feel safe.) and a '[ここに書き込む]' (Write here) link.

Used in actual
class of
elementary
school

Community Anticrime Action Support

Pref.-to-Pref.
Comparison

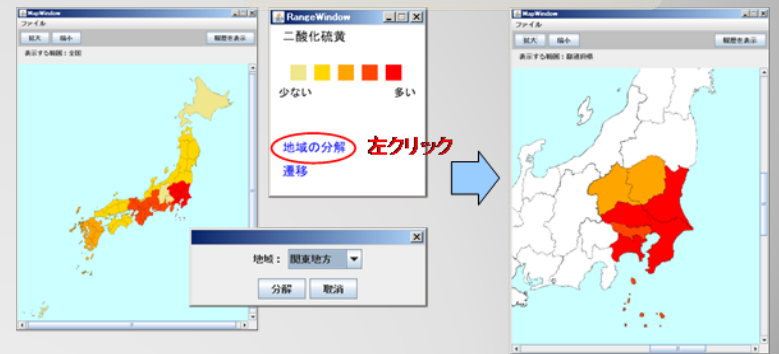
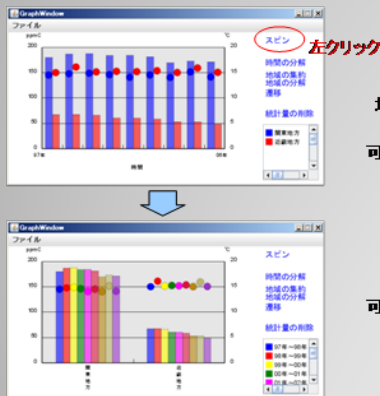
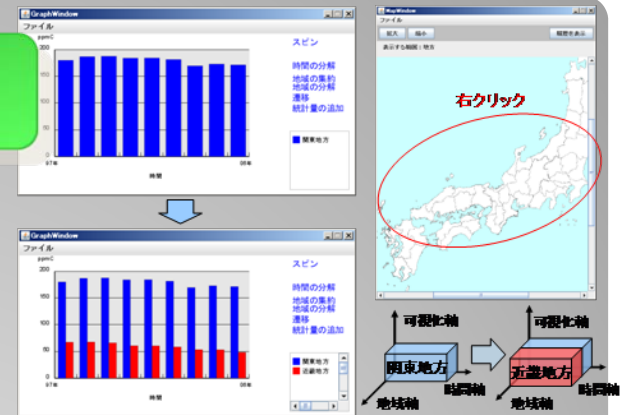


Map to
Chart

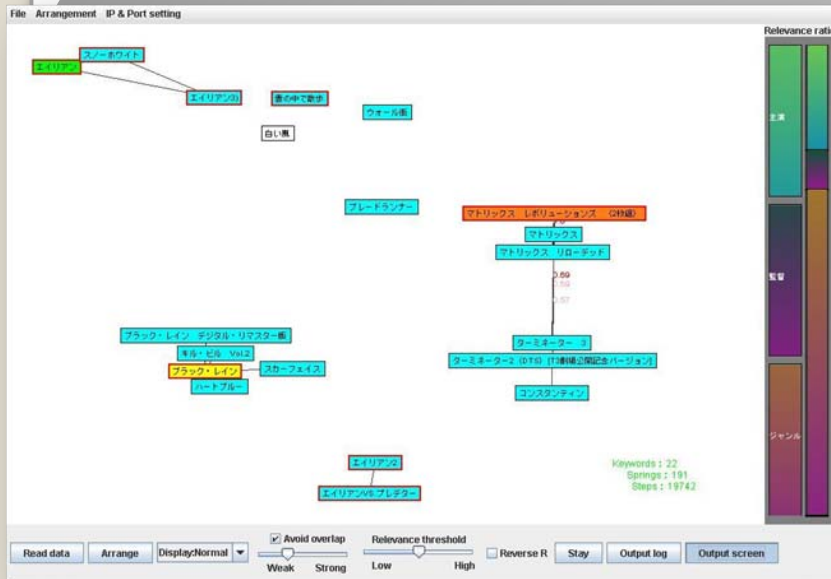
Mouse
Operation Only

Spatial Drilldown

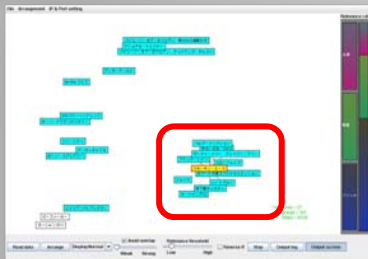
Temporal to
Spatial



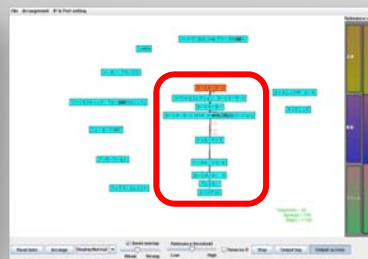
Visualization Cube:
Intuitive Data Exploration



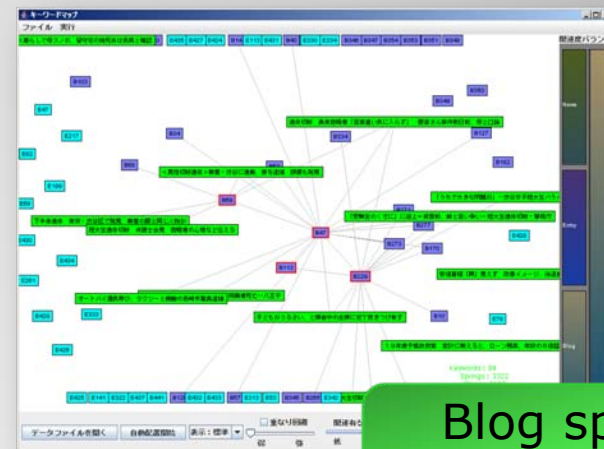
- Visualization of graph structure
- High-level interactive functions
- Multiple relevance controller
- Available for various application



Aggregation

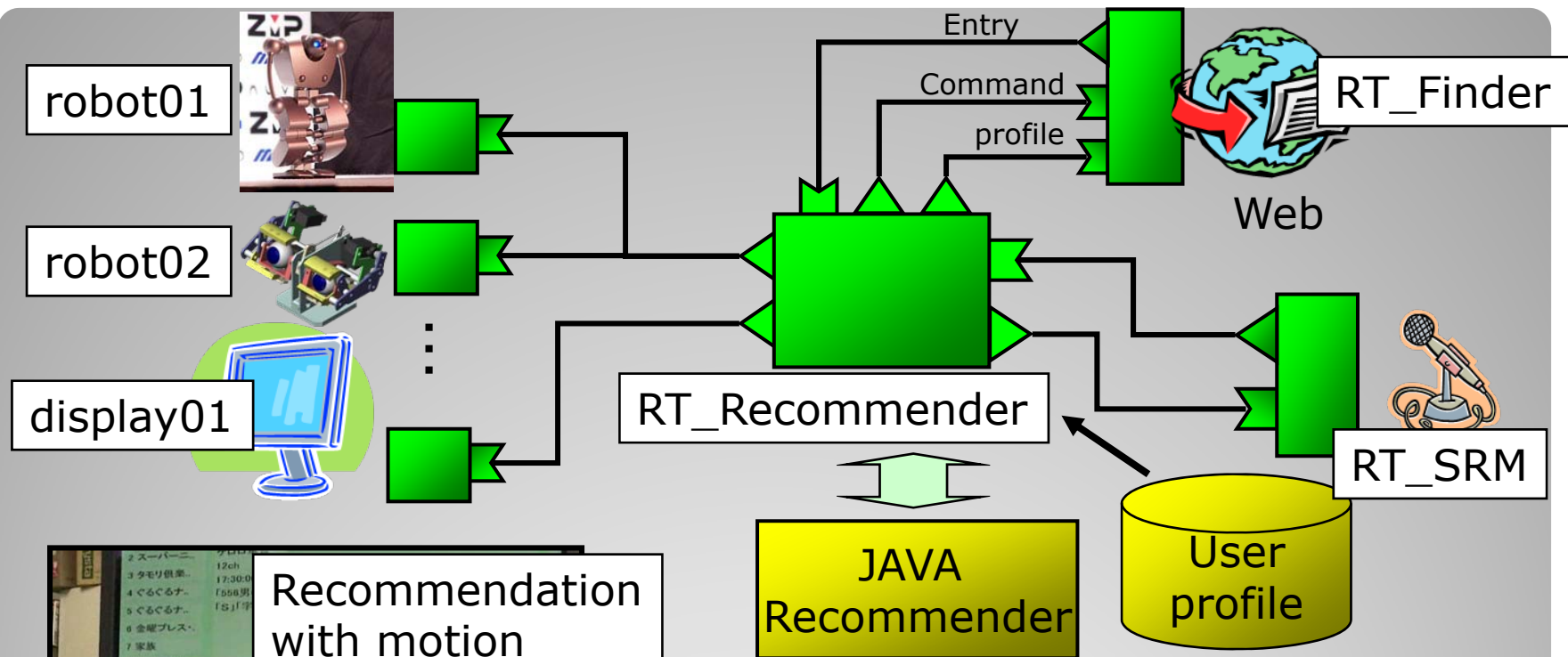


Alignment



Blog space
Visualization

Keyword Map:
General-purpose Visualization



Recommendation with motion

- User profiling from TV watching behavior
- Recommendation without interfering TV watching

Partner Robot: Recommendation under TV watching Environment