

# Visualising the Past: Annotating a Life with Linked Open Data

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Electronics and Computer Science

# Lifelogging and Life Annotation



# Lifelogging and Life Annotation



# The Imouto Life Annotation System

- Original version
  - Developed 2006–2007
  - Ran on a PDA
  - Collected GPS data and, later, nearby Bluetooth MAC addresses.
  - Battery life a major issue!



# Making Use of the Data

## Person Detection



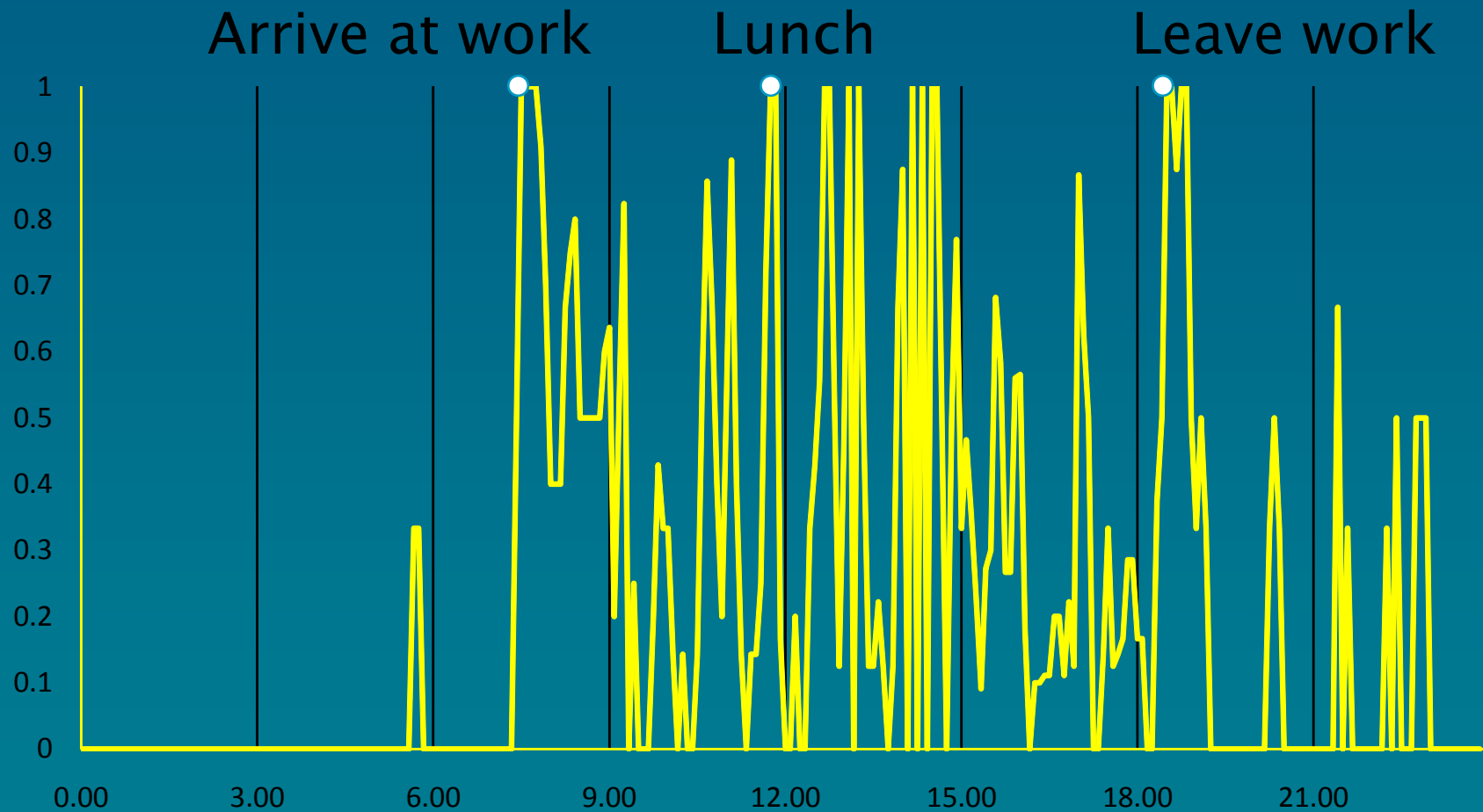
# Making Use of the Data Location Detection

- GPS doesn't work indoors...

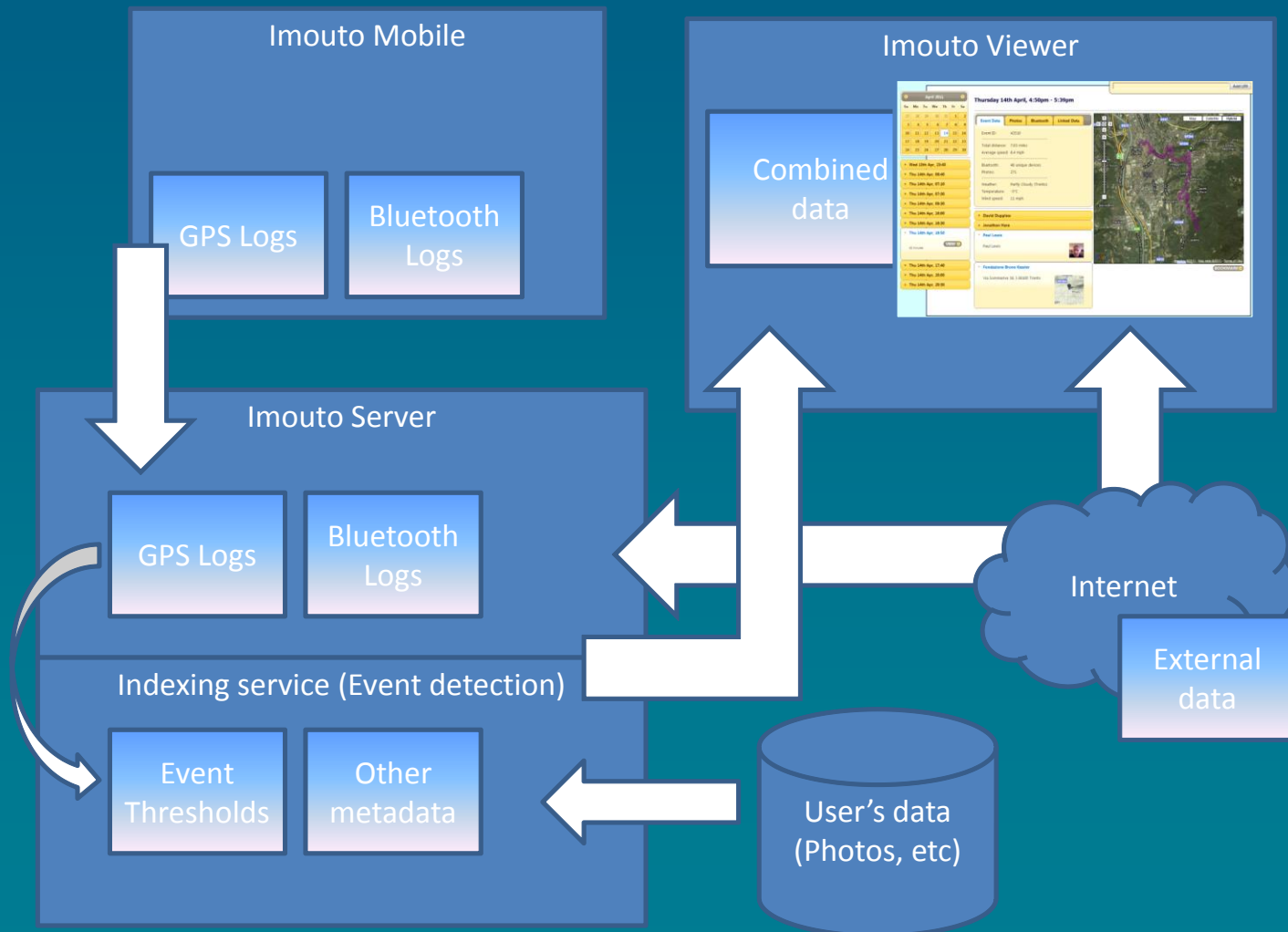


# Making Use of the Data

## Event Detection



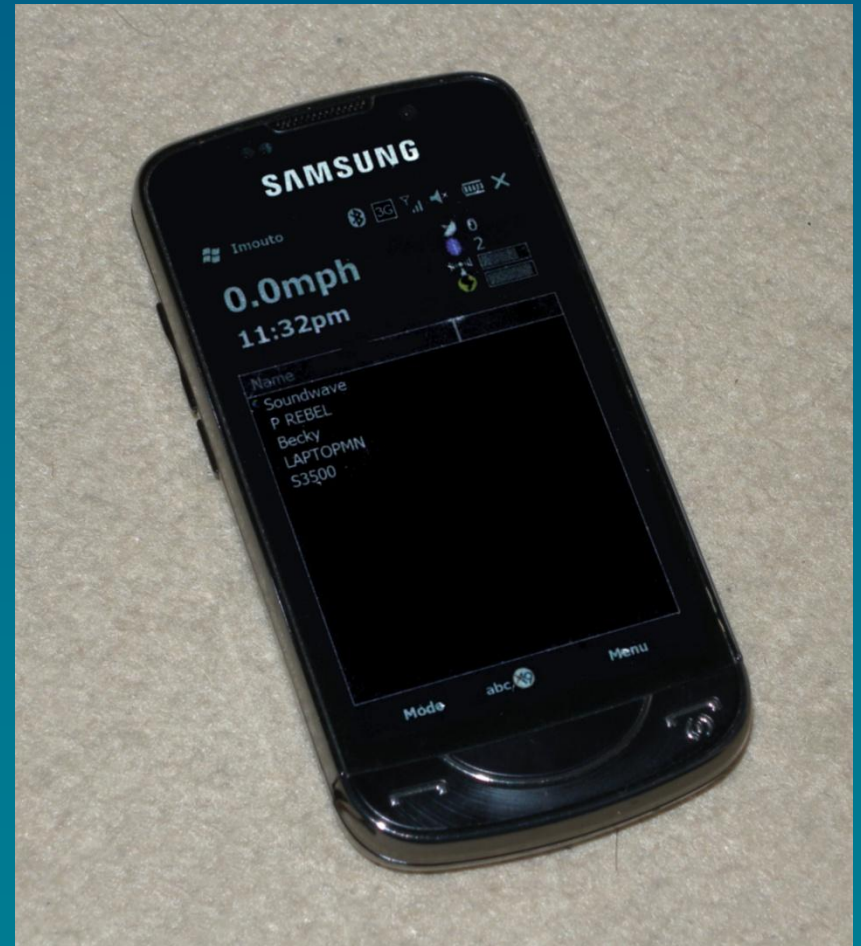
# The Imouto Life Annotation System





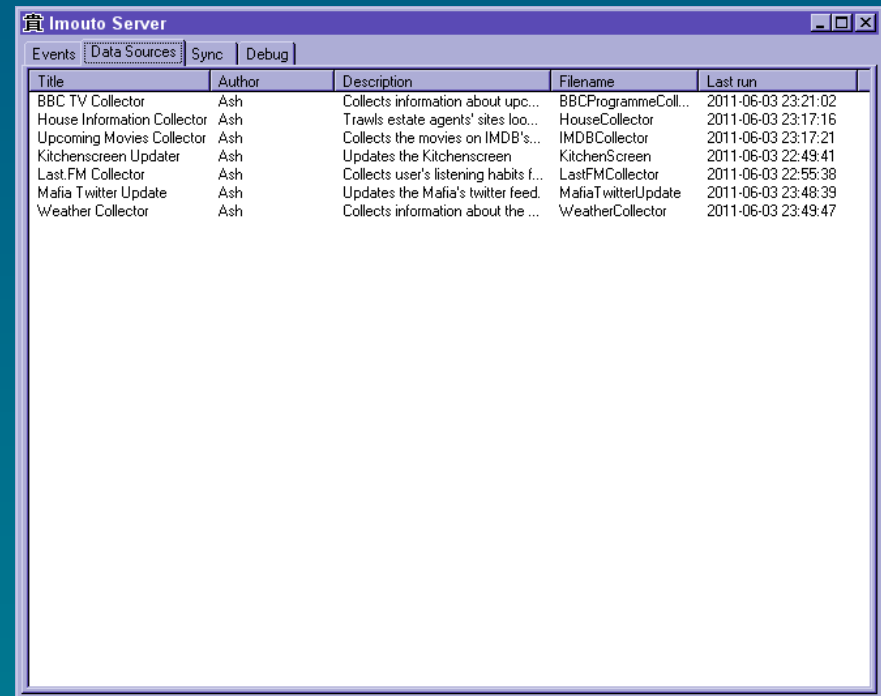
# The Imouto Life Annotation System

- “Imouto Mobile”
  - Runs on a mobile phone.
  - Passive.
  - Quite dumb; sole purpose is to collect information from the device’s sensors.



# The Imouto Life Annotation System

- “Imouto Server”
  - Runs on a Windows PC.
  - Runs in the background.
  - Also quite dumb; scrapes information from the web stores alongside information from Imouto Mobile.
  - “Collector framework”



The screenshot shows a Windows application window titled "Imouto Server". The window has a menu bar with "Events", "Data Sources", "Sync", and "Debug". Below the menu bar is a table with the following columns: Title, Author, Description, Filename, and Last run. The table contains the following data:

Title	Author	Description	Filename	Last run
BBC TV Collector	Ash	Collects information about upc...	BBCProgrammeColl...	2011-06-03 23:21:02
House Information Collector	Ash	Trawls estate agents' sites loo...	HouseCollector	2011-06-03 23:17:16
Upcoming Movies Collector	Ash	Collects the movies on IMDB's...	IMDBCollector	2011-06-03 23:17:21
Kitchenscreen Updater	Ash	Updates the Kitchenscreen	KitchenScreen	2011-06-03 22:49:41
Last.FM Collector	Ash	Collects user's listening habits f...	LastFMCollector	2011-06-03 22:55:38
Mafia Twitter Update	Ash	Updates the Mafia's twitter feed.	MafiaTwitterUpdate	2011-06-03 23:48:39
Weather Collector	Ash	Collects information about the ...	WeatherCollector	2011-06-03 23:49:47

# The Imouto Life Annotation System

- “Imouto Viewer”
  - Runs in a web browser.
  - Not dumb!
  - Combines lifelogs and life annotations, organises them and displays them in a user-friendly way.

The screenshot displays the Imouto Viewer interface for a specific event on Thursday, 14th April, from 4:50pm to 5:39pm. The interface is organized into several sections:

- Calendar:** A calendar view for April 2011, with the 14th highlighted.
- Event Summary:** Displays event ID 43510, total distance of 7.03 miles, and average speed of 8.4 mph.
- Event Data:** A tabbed section with sub-tabs for Photos, Bluetooth, and Narrative. It lists 48 unique Bluetooth devices and 271 photos.
- Weather:** Shows conditions for Trento: Partly Cloudy, -3°C, and 11 mph wind speed.
- Participants:** Lists names such as David Dupplaw, Jonathon Hare, Paul Lewis, and Fondazione Bruno Kessler.
- Map:** A satellite map showing a purple route through a city area.
- Timeline:** A vertical list of time slots for the day, with the selected event highlighted.

April 2011

Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

### Thursday 14th April, 4:50pm - 5:39pm

**Event Data** | Photos | Bluetooth | Narrative

Event ID: 43510

---

Total distance: 7.03 miles  
Average speed: 8.4 mph

---

Bluetooth: 48 unique devices  
Photos: 271

---

Weather: Partly Cloudy (Trento)  
Temperature: -3°C  
Wind speed: 11 mph

- ▶ Wed 13th Apr, 23:40
- ▶ Thu 14th Apr, 06:40
- ▶ Thu 14th Apr, 07:10
- ▶ Thu 14th Apr, 07:30
- ▶ Thu 14th Apr, 09:30
- ▶ Thu 14th Apr, 16:00
- ▶ Thu 14th Apr, 16:30
- ▼ Thu 14th Apr, 16:50
 

50 minutes VIEW

LM Meetings
- ▶ Thu 14th Apr, 17:40
- ▶ Thu 14th Apr, 20:00
- ▶ Thu 14th Apr, 20:30

- ▶ David Dupplaw
- ▶ Jonathon Hare

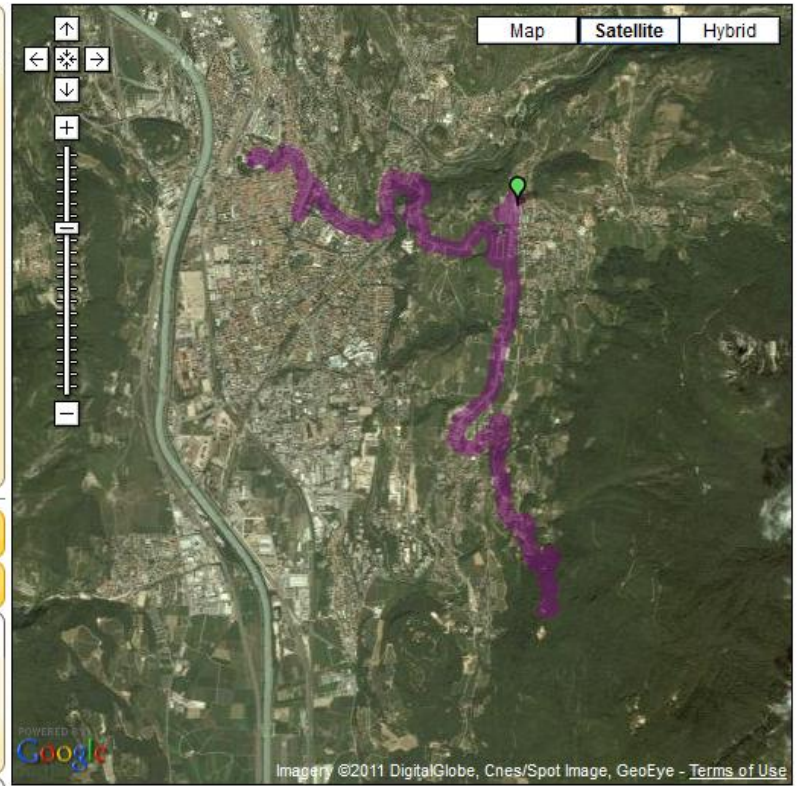
▼ Paul Lewis

Paul Lewis



▼ Fondazione Bruno Kessler

Via Sommarive 18, I-38100 Trento

BOOKMARK

# Open Linked Data

Add RDF

## Ash Smith

Local info | **Linked data** | URIs | Connections

description

Dr Ashley Smith is a research assistant in the School of Electronics and Computer Science at the University of Southampton. He carried out his PhD under the supervision of Professor Dame Wendy Hall and Dr Les Carr, following his Masters degree from the University of Portsmouth and his Bachelors degree from Southampton. Ash has previously worked in industry as a software developer as well as a freelance web programmer and designer, and has a keen interest in the Semantic Web and Knowledge Management technologies. The process of writing Ash's thesis involved as much practical development as it did theory, and during its course he developed a Life Annotation system, designed to collect snippets of raw contextual data from both the physical and digital worlds, and link them together in a local server, allowing relevant information digests to be generated based on the user's actions. His work in this area is still ongoing; he develops software for a variety of different platforms, desktop, server and mobile, and often uses himself as a test subject. Ash is currently working on two international projects directly related to his PhD work. In his spare time he is involved in Hampshire's live music community and enjoys building unnecessary technology into his house.

title

hasBiography

<p>Dr Ashley Smith is a research assistant in the School of Electronics and Computer Science at the University of Southampton. He carried out his PhD under the supervision of Professor Dame Wendy Hall and Dr Les Carr, following his Masters degree from the University of Portsmouth and his

June 2011						
Su	Mo	Tu	We	Th	Fr	Sa
29	30	31	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	1	2

- ▶ Sat 11th Jun, 00:00
- ▶ Sat 11th Jun, 00:10
- ▶ Sat 11th Jun, 12:50
- ▶ Sat 11th Jun, 13:20
- ▶ Sat 11th Jun, 13:30
- ▶ Sat 11th Jun, 14:00
- ▶ Sat 11th Jun, 14:20
- ▶ Sat 11th Jun, 15:20
- ▶ Sat 11th Jun, 15:30
- ▶ Sat 11th Jun, 16:40
- ▶ Sat 11th Jun, 19:00

▼ Sat 11th Jun, 20:00

VIEW

June 2011						
Su	Mo	Tu	We	Th	Fr	Sa
29	30	31	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	1	2

- ▶ Sat 11th Jun, 00:00
- ▶ Sat 11th Jun, 00:10
- ▶ Sat 11th Jun, 12:50
- ▶ Sat 11th Jun, 13:20
- ▶ Sat 11th Jun, 13:30
- ▶ Sat 11th Jun, 14:00
- ▶ Sat 11th Jun, 14:20
- ▶ Sat 11th Jun, 15:20
- ▶ Sat 11th Jun, 15:30
- ▶ Sat 11th Jun, 16:40
- ▶ Sat 11th Jun, 19:00
- ▼ Sat 11th Jun, 20:00
  - 2 hours
  - VIEW
- ▶ Sat 11th Jun, 22:40
- ▶ Sat 11th Jun, 23:30

# Privacy and Lifelogging

- Imouto uses 'local' approach
- But DO LIFELOG!
  - Lifelogging can improve privacy automatically.
  - Surveillance is out there – regain control of your data.

# The Social Value of Lifelogging

- Information Overload
  - Disk space is cheap
  - We don't know what will be important!
- Context
  - Collect all, organise it properly, and it's there when needed.

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