

- Headed by **Andy Hopper**

- Lecturers

- Robert Harle
- Alastair Beresford
- Andy Rice
- Ian Wassell

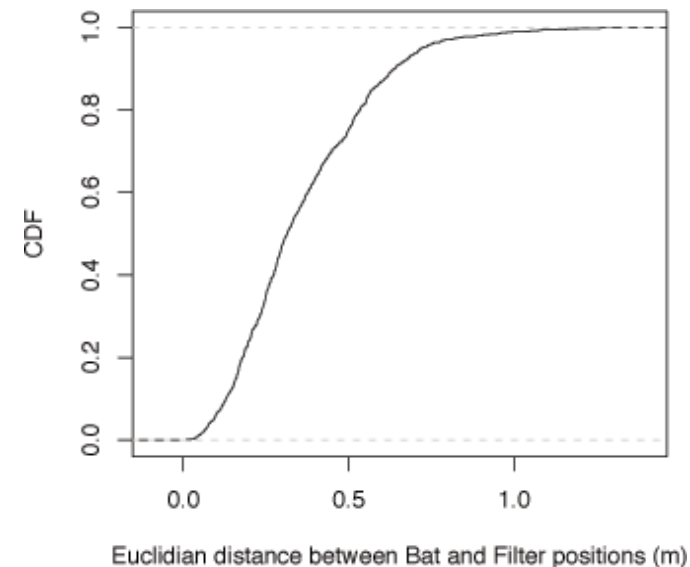
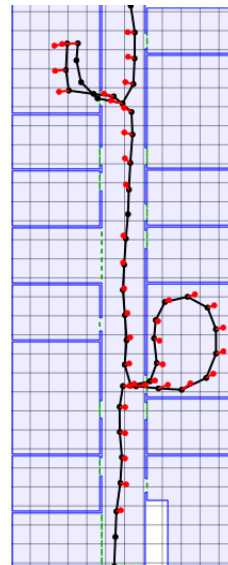
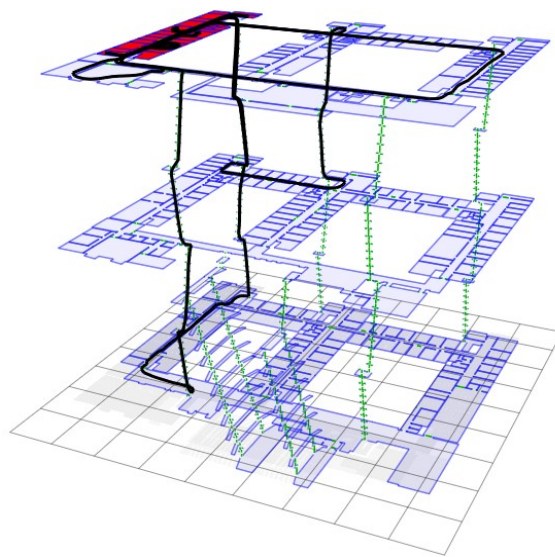
- Strong industrial links

- Diverse research interests, but best known for work on **location, pervasive, sentient and mobile computing** systems as well as low level wireless communications.



The screenshot shows the website for the Digital Technology Group at the University of Cambridge. At the top, it features the University of Cambridge crest and the text "UNIVERSITY OF CAMBRIDGE" and "800 YEARS 1209 ~ 2009". Below this is a breadcrumb trail: "Computer Laboratory > Research > Digital Technology Group". The main heading is "DIGITAL TECHNOLOGY GROUP" in large, bold, black letters. To the right of the heading is a close-up image of a green printed circuit board (PCB) with various electronic components. Below the heading, there is a paragraph of text: "The Digital Technology Group (DTG) is a research group within the *Computer Laboratory* led by Professor [Andy Hopper](#). The DTG has a very wide area of expertise, its research spans from design, analysis and implementation at the physical level to development of novel systems. The group has an experience gained from a [long history](#) of applied research. As a distinctive feature, the research projects of the group are also implemented in hardware and tested in real-world environments."

- **Sensor Systems and Data Interpretation**
  - Location Tracking and Awareness



- Can inertial sensors on mobile phones be used for tracking?
- What other technologies are there?
- How do we fuse different technologies?
- What accuracy can we achieve? What are the trade-offs?
- How do we process location events if we get them?
- What is the application framework?
- How sensitive is the data?

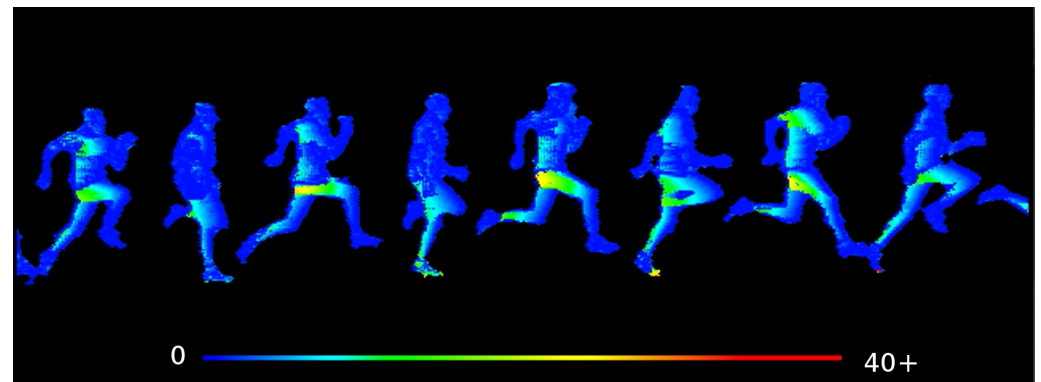
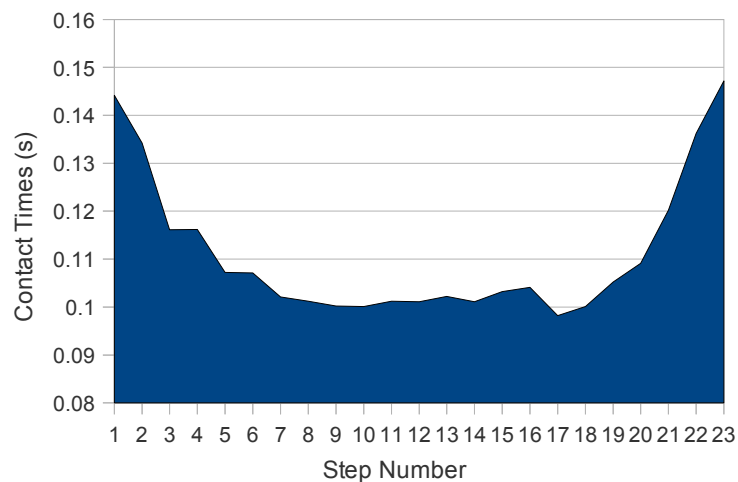


- **Sensor Systems and Data Interpretation**

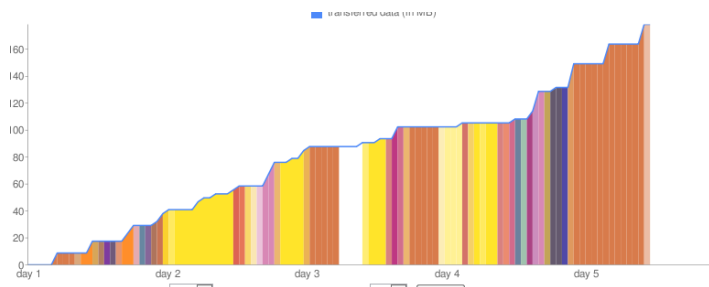
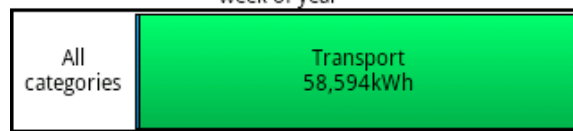
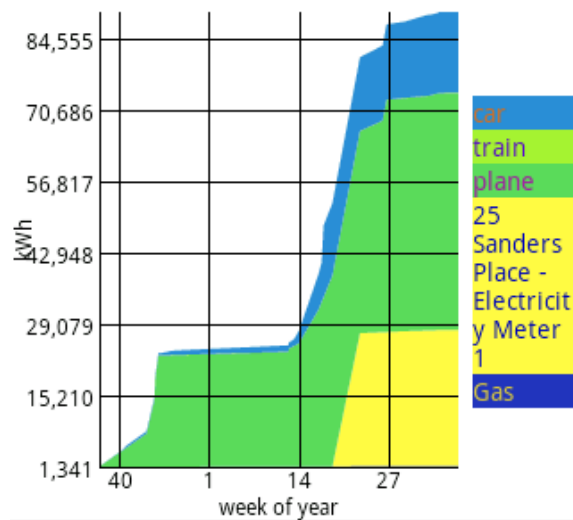
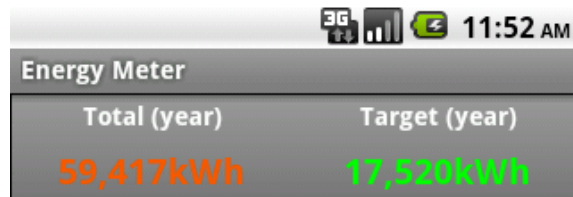
- Wireless Sensing for Sports and Health



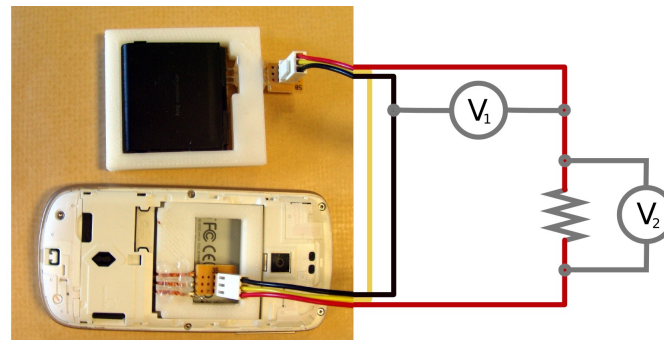
- What can we infer from foot sensors?
- How do we compress and transmit the data?
- How do we design the sensor node?
- Does this work for pedestrians?
- How do we handle multiple people?
- How do we keep the data private?
- How do we apply this in the healthcare domain?



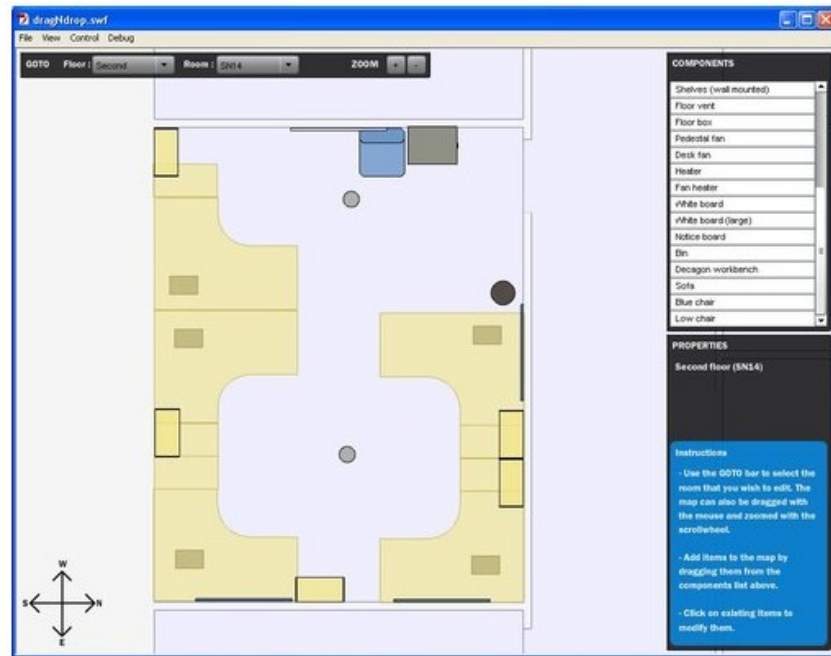
## • Mobiles as a Computing Platform



- How do people use these devices?
- What new sensing opportunities do these devices bring?
- How do we program for such power-limited devices?
- How do we profile these devices?
- How can they collaborate?
- How do we gather and present information using these devices?

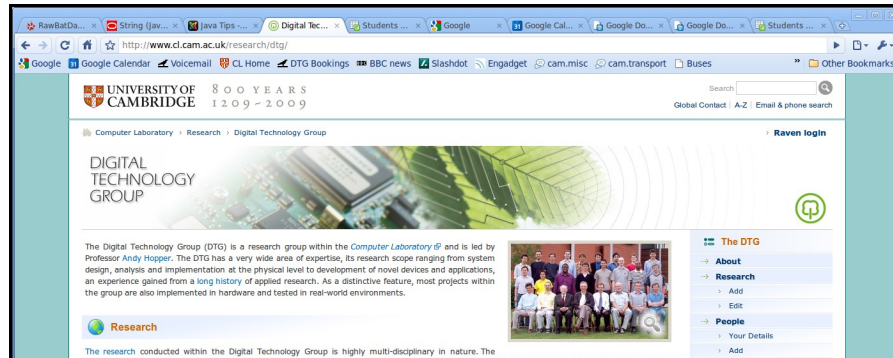


- **Privacy**



- How do we store and search this data without risking an individual's privacy?
  - Google grant that will support a PhD studentship or two...

# DTG Contacts



[www.cl.cam.ac.uk/research/dtg](http://www.cl.cam.ac.uk/research/dtg)



Contact me in the first instance

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