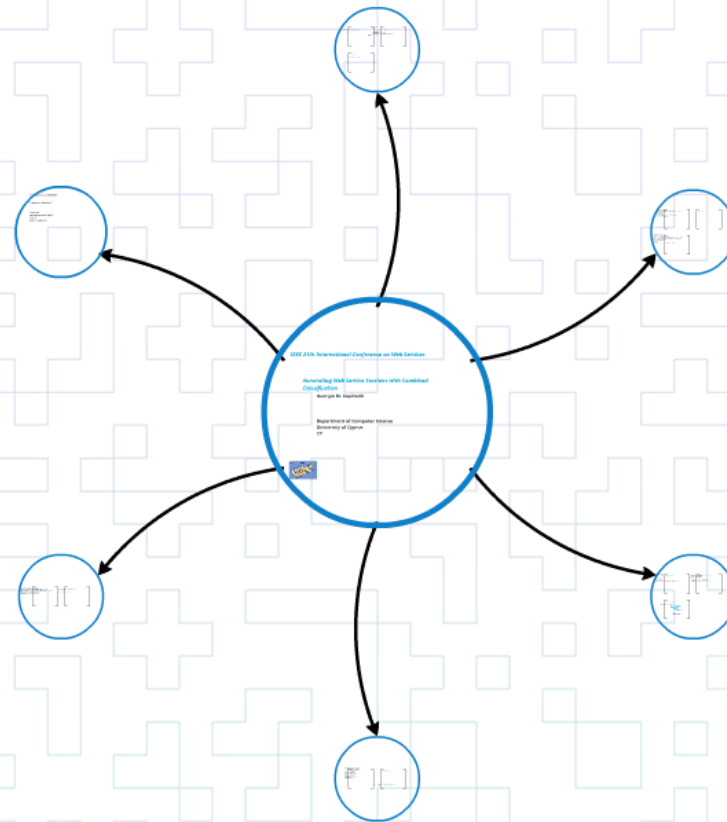




Message

For more information on this position, please visit the website: <https://www.cam.ac.uk/undergraduate/apply>

Key features

- study in the heart of Cambridge and close to the city centre
- e.g. 100% of the course is taught in English
- supporting the local

Information on the course

Search for more information

Researcher to be appointed

Department of Computer Science
University of Cambridge

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1st International KEYSTONE Conference (IKC2015)

Searching over mobile user activity data

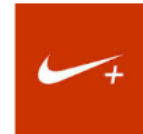
Georgia M. Kapitsaki



Georgia M. Kapitsaki and John G. Breslin
University of Cyprus, Cyprus
and
National University of Ireland Galway, Ireland

Motivation

- **Pervasive computing is everywhere**
 - user data is gathered constantly
- **Activity trackers:**
 - *activity trackers in the form of equipment and devices are on every wrist or smart device.. almost*
 - *(e.g., from MisFit, FitBit, Garmin etc.)*
 - *contributing to the IoT*



What to do with the data?

- Vast amount of data
 - Can be utilized in different ways
 - e.g., health issues, predictions
 - crowdsourcing
- User activity recognition using data from different user sensors (e.g., accelerometer data, GPS).

Our current questions

- Search methods over structured data tailored to the needs of activity tracking data
- In which ways can activity tracking data be combined to assist with reasoning actions and user recommendations?
- How is it possible to perform scalable search in this new environment of heterogeneous devices with data represented in different formats coming from different sources?









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And now what?

- **Open research areas to answer the questions:**
 - uniform data representation
 - data transformations
 - semantic aspects of data
 - intelligent searching mechanisms
 - recommendation algorithms for activity tracking data
 - health predictions

Thank you for your attention!

Comments / Questions ?

Contact @

www.cs.ucy.ac.cy/~gkapi/

E-mail

gkapi@cs.ucy.ac.cy