LBS 2021

16th Conference on Location Based Services
24-25 November 2021 Online

Call for Papers

The ICA Commission on Location Based Services and The University of Glasgow are pleased to invite you to the **16th International Conference on Location Based Services (LBS 2021)**, which will take place **fully online** on 24—25 November 2021.

Participants and Focus

Built on the success of previous conferences in this series, LBS 2021 is addressed to scholars and researchers, digital industry / market operators, and students of different backgrounds (scientific, engineering and humanistic) whose work is either focused on or relevant to location based services (LBS). The conference will offer a common ground to colleagues from various disciplines and practices where they can meet, interact and exchange knowledge, experience, plans and ideas on how LBS can and could be improved and on how it will influence both science and society.

Topics include (but not limited to):

- **Location Data Analytics and Contact-Tracing Apps for Combating Covid-19**
  - Contact-tracing: mobile applications, data analysis and simulation
  - Modelling human dynamics, social distancing, and mobility
  - Privacy-preserving and ethically-aware data processing and analysis
- **Ubiquitous Positioning and Navigation**
  - Outdoor and indoor positioning
  - Multi-sensor system and sensor fusion
  - Seamless (indoor-outdoor) navigation
  - Simultaneous Localisation And Mapping (SLAM)
- **Spatial Cognition and Place**
  - Spatial cognition in the mobile era
  - Sense of place and place modelling
  - Cognitive navigation
  - Landmark-based localisation and navigation
- **New Forms of Location Data**
  - Location-based social media and Geotagged big data
  - Crowdsourced and volunteered geographic information (VGI)
  - Mobile data and activity analysis
- **Contextual Information and Context-awareness**
  - Smart environments and ambient intelligence
  - Indoor spatial data modelling and mapping
  - Semantic data models for LBS
  - Context modelling, personalisation and context-aware adaptation
- **Mobile User Interface and Interaction**
  - Visualisation techniques for LBS
  - Mobile human-computer interaction
  - Augmented and virtual reality
- **User Studies and Evaluation**
  - Evaluation methodologies for LBS
  - User experiences of LBS
  - Mobile spatial cognition
- **Social and Behavioural Implications of LBS**
  - Location privacy
  - Legal and ethical aspects in LBS

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- Biases in location data analytics and Artificial Intelligence (AI)
- o **Innovative LBS and Applications**
  - Smart cities and transportation
  - Autonomous and connected vehicles
  - Artificial intelligence and LBS
  - Mobile healthcare
  - Location based social networks and games
  - Digital humanities
- o **Ubiquitous Mapping in Early Warning and Crisis Management** (co-organised by the [ICA Commission on CEW & CM](#))
  - Emergency oriented indoor and outdoor integrated positioning
  - Emergency oriented ubiquitous and adaptive mapping
  - Dynamic and real-time cartographic visualisation and processing

Submissions

The following paper categories are welcome:

- **Full papers** – to present significant scientific results. Full papers will be double-blind peer-reviewed. High-quality submissions will be accepted for presentation at the conference and published in [Springer's Lecture Notes in Geoinformation and Cartography Series](#), [Journal of Location Based Services](#) or [Journal of Navigation](#). Manuscripts must describe original work that has neither been published before**,** nor is currently under review elsewhere. Papers should be written in English using the [Word](#) or [LaTex](#) template, and should not exceed 25 pages (including title, figures, and references). Full papers must be submitted in PDF format through the [Easychair](#) website by the **8th August 2021**.

- **Work in progress** – to present ongoing work. An extended abstract, up to 1200 words, should include succinct and sufficient information about research objectives, significance, method, and preliminary or expected findings. If accepted, you are invited to give an oral presentation at the conference and an extended abstract or full paper (your choice) will be published in the online proceedings of the conference (with a DOI). Extended abstracts can include an up-to 400-word summary. The submissions should be in single column, single-spaced with figures and tables within the text, and submitted in PDF format through the [Easychair](#) website by the **29th August 2021**.

We are also pleased to announce two awards at LBS 2021: **one Best paper award**, and **one work in progress award**. More details will be published on the conference website.

Important Dates

- Full paper submission: 8 August 2021
- Work in progress submission: 29 August
- Notification of full paper: 24 September
- Notification of work in progress: 24 September 2021
- Camera-ready full papers and work in progress: 30 October 2021
- Registration Deadline: 20th Nov 2021
- Conference: 24-25 November 2021, fully online

Conference Website

https://lbsconference.org/

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