



TECHNOLOGY HIGHLIGHT

Dynamic Crowd Solutions: **FORECAST**

MOBILITY DEPARTMENT

DYNAMIC CROWD SOLUTIONS: *FORECAST*



Despite extensive pre-event planning and well developed security concepts, the dynamic nature of large events can lead to unforeseen, tragic incidents. Reliable and timely information such as the current and expected number of visitors, people densities and their spatial distribution is vital for the safety of visitors. Reports about critical situations to the operations centre by human observers are subjective and usually too late to initiate effective countermeasures. While real-time sensor measurements about human motion may provide sufficiently accurate quantitative data, complete coverage of an entire event area with sensors to provide all required data is prohibitively expensive.

FORECAST is a unique decision support system combining real-time pedestrian flow measurement technologies with novel methods in crowd simulation. *FORECAST* does not require complete sensor coverage of an event area, but measures

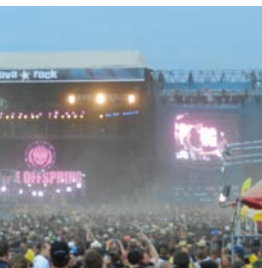




human motion data such as people counts and origin-destination relations only at and between neuralgic points. It efficiently feeds the measured motion data into AIT's simulation methods to achieve the required spatial and temporal resolution for estimating the crowd distribution, crowd densities and walking speed on the premises.

FORECAST provides decision makers in police, fire departments, security services and event organisations with an overview of the current situation as well as multi-temporal forecasts. It effectively supports them to assess the current situation and identify critical situations in a timely manner to initiate appropriate countermeasures.

FORECAST decreases the risk of injuries to visitors and increases their general sense of safety and security at major events.



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