



1.400
RESEARCHERS

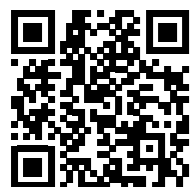
11 LOCATIONS

7 CENTERS

AIT IS AUSTRIA'S LARGEST
RESEARCH UND TECHNOLOGY
ORGANISATION



MORE ABOUT SIMULATE:



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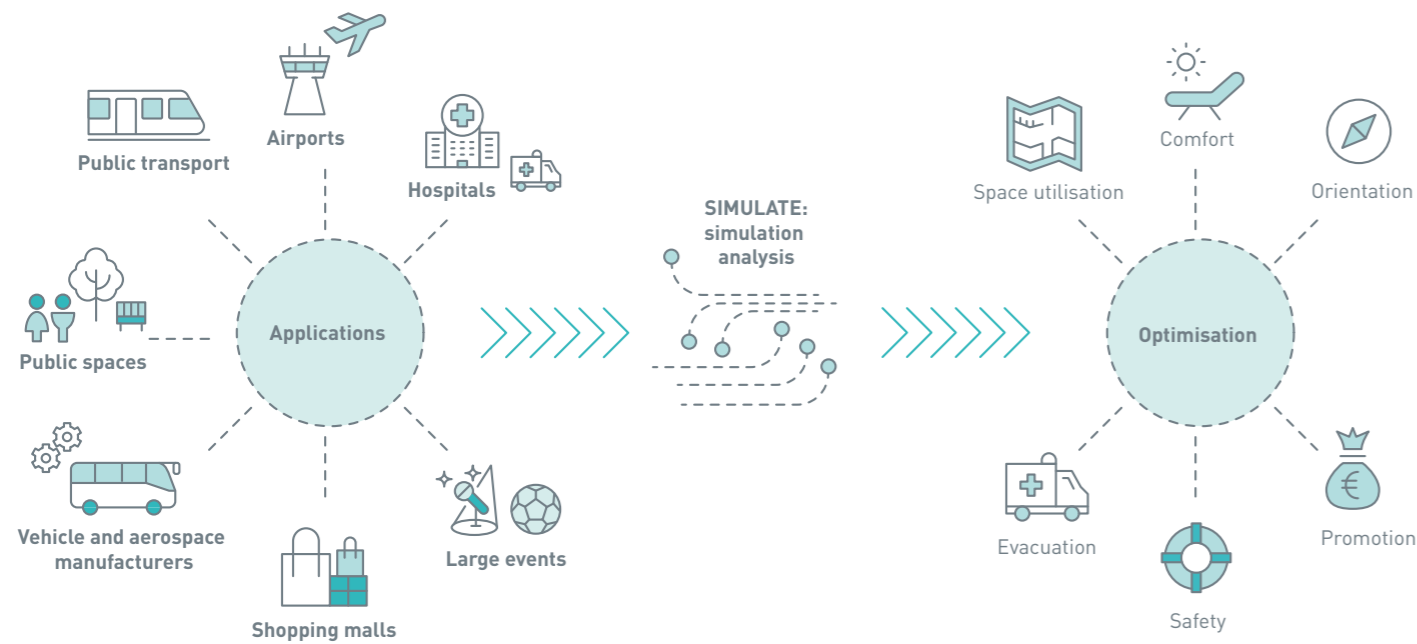
www.ait.ac.at/simulate

SIMULATE

Simulation, analysis and optimisation of customer
and pedestrian flows

SIMULATE: HIGHER SAFETY, COMFORT AND EFFICIENCY FOR PEDESTRIAN FLOWS

The analysis and optimisation of pedestrian flows in urban areas is a major challenge. Based on the latest research results and state-of-the-art technologies, AIT offers tailor-made scalable solutions for simulation, analysis and planning.



SIMULATE – WHEN PEDESTRIAN FLOWS HAVE TO BE MANAGED EFFICIENTLY AND SAFELY

The potential applications of SIMULATE are as varied as urban challenges themselves. These include safety-related issues like the evacuation of large buildings or large events, business management tasks such as optimising customer flows in shopping malls, or new approaches in the design of buses, trains, and bus/tram stops.

HANDS-ON SIMULATION AND ANALYSIS AT THE CUTTING EDGE OF RESEARCH AND TECHNOLOGY

Visitor, passenger, and customer flows in virtual environments are simulated using software tools developed at the AIT and decades worth of research. Structural adjustments such as changes to passages, or organisational measures like diversions can be demonstrated and analysed in 2D/3D animations. Measurement data from the actual infrastructure can also be included.

OPTIMISING, INCREASING EFFICIENCY, MINIMISING RISKS AND POTENTIAL DANGERS

Various optimisation goals can be achieved depending on the task set – this also includes mapping of highly specialised cases, such as the movements of patients in hospitals. Another example is the ideal use of limited space in airports under consideration of security, comfort and commercial aspects.



Increasing urbanisation means increasing and more complex passenger flows



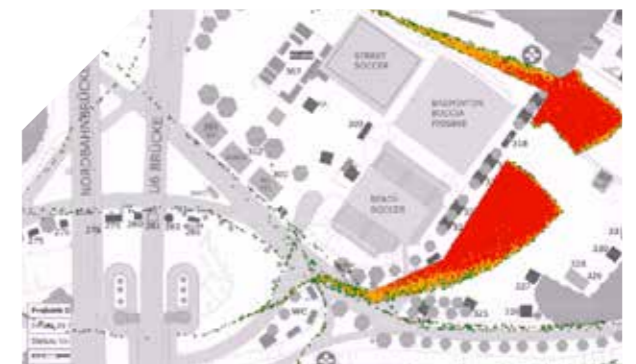
SIMULATE IS A SCIENTIFICALLY VALIDATED AIT METHOD

The methods we use in SIMULATE are scientifically recognised and the result of years of research in crowd dynamics. Comprehensive data from a large number of real person flow analyses is a key component of the models and methods used.



FLOW SIMULATIONS IMPROVE YOUR DECISION BASIS

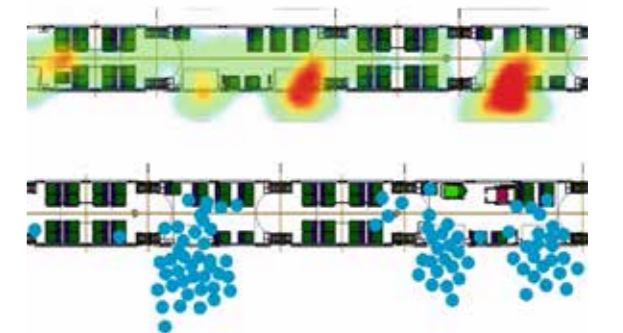
SIMULATE simulates pedestrian flows, displays flow rates and shows main routes and potential bottlenecks. Scenarios for structural and organisational measures can be analysed in movement models as well as in virtual environments. The results can then be presented using 2D and 3D animations as well as a number of evaluation methods.



Example of the Viennese Donauinselfest with more than three million visitors: SIMULATE evaluates evacuation times and bottlenecks.

EVERYTHING SIMULATES: YOUR BENEFITS

- Cutting costs by ensuring optimum mobility, efficiency, comfort, and safety
- Best possible basis for decisions, preventing bad investments for existing and planned environments
- Flexible scenario technology enables testing of alternative actions
- Efficient and cost-effective process flow, e.g. using existing CAD plans
- Future-proof, e.g. through compliance to BIM standard [Building Information Modelling]



Who boards at a certain point, who gets off? SIMULATE analyses, among other things, passenger change in trams and trains.