You and Your Surroundings: Enriching Experiences and Insights in Computer and Live Environments (Carmel)

Dr. Joel Lanir

Background

The Human-Computer Interaction and Visualization Lab, headed by Dr. Joel Lanir at the University of Haifa, deals with a wide variety of research areas in the broader field of human-computer interaction. The lab focuses on researching the design, implementation and evaluation of novel technologies, as well as on the study and understanding of how technologies affect human behavior.

Human-Computer Interaction and Data Visualization

Dr. Joel Lanir, head of the Human-Computer Interaction and Visualization Lab, researches a variety of topics related to human-computer interaction (HCI) and information visualization. In HCI, he examines novel mobile interaction techniques as well as context-aware computing. In information visualization, he examines ways to visualize complex data in a visual analytics process that involves a human analyzer interacting with a visualization system in order to be able to find various insights such as temporal trends and predictions.

Dr. Lanir is an expert in user interface (UI) and user experience (UX) design, as well as in the evaluation of interactive computing systems.

Research Status

Current projects headed by Dr. Lanir at the Human-Computer Interaction and Visualization Lab include:

Examining how to visualize real-time, temporal, multidimensional information in order to find patterns that change over time and predict trends. For example: extracting news events from multiple news sources and Tweets, and visualizing the evolution of the event over time, showing temporal, geographical, theme and sentiment information.

Augmented reality (AR) in context-aware environments: The team is examining how to build usable AR interfaces according to human social norms. The initial project looks at how to design and use an AR mobile museum guide in a smart IoT-based museum (where exhibits are equipped with sensors). The AR guide will provide the visitors with contextual information, according to their location and interests, by drawing information from the sensors around. This project is based on previous work done in the University of Haifa's Hecht Museum.

Technology and cultural heritage: Examining how to design and evaluate novel technology at cultural heritage sites to enhance visitor experience.

Applications

View projects being developed at the Human-Computer Interaction and Visualization Lab here.
Augmented reality for older adults
Understanding museum visitor behavior
Composite indicator (CI) visualization
DynamicMaps - a novel system for browsing through a very large set of images according to similarity
Evaluation of spatio-temporal visualizations
Understanding feet interaction - examining how foot interaction can serve users in controlling and interacting with technological devices
Context-aware computing at the museum

_____

ITTN - Israel Tech Transfer Network
Yeda Research & Development Co. Ltd, P.O Box 95, Rehovot 7610002, Israel, Telephone: 972-8-9470617, Fax: 972-8-9470739

Page 1/2

TeleAdvisor - allowing a remote expert to naturally guide a local user in need of assistance in carrying out physical tasks around real-world objects
The role of emotions in image seeking
MultiPresenter - examining how to design presentation software for very large surfaces or multiple screens

Related pages

Joel Lanir, Dr.

Human-Computer Interaction and Data Visualization Lab's website

Contact us for further information.

_____

Carmel-Haifa University Economic Corporation Ltd.
Eshkol Tower, 25th floor, Room 2509 , Haifa University, Mount Carmel
Haifa 31905, ISRAEL
Tel: 972-4-8288500
Fax: 972-4-8288499

_____
ITTN - Israel Tech Transfer Network
Yeda Research & Development Co. Ltd, P.O Box 95, Rehovot 7610002, Israel, Telephone: 972-8-9470617, Fax: 972-8-9470739

Page 2/2