

Dino Hunter Applications for the Senckenberg Museum – Field Report

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Dino Hunter Integrated Concepts

The global idea of Dino Hunter originated by the cooperation of the Digital Storytelling Department of ZGDV Darmstadt e.V. and ion2s – buero fuer interaktion aims at the establishment of Integrated Concepts for mobile edutainment applications, especially in the community of scientific museums and the research discipline of palaeontology. Within this article two Dino Hunter peculiarities »DinoSim« and »DinoExplore« are presented as typical examples of the wide range of Dino Hunter applications. These applications are primarily developed by the storytelling group at ZGDV Darmstadt with support of Henry Kohtz as 3D modelling and animation expert and ion2s as specialists in the field of user interaction design. The scientific basis is provided by Dr. Bernd Herkner as specialist in the field of palaeontology at the Senckenberg museum and Klaus Milczewsky from T-Online International AG, one of Europe's largest ISPs and sponsor of the Dino Hunter applications for the Senckenberg museum.

DinoSim

The objective of DinoSim is the provision of simulation technology to surf around dinosaurs and to get individual views on the T-Rex, Diplodocus or other famous dinosaurs placed in the dinosaur hall at the Senckenberg museum. Here, different layers are integrated within the 3D Dino models, for instance apart from the skeleton and bones further layers such as blood circulations and organs. The application scenario enables users/visitors (especially kids) to interact

German Abstract

DinoHunter bietet integrierte Konzepte für mobile Edutainment-Anwendungen, speziell Museumsanwendungen und unterstützt alle Beteiligten in den drei Phasen: Vorbereitung, Durchführung und Nachbereitung von Museumsbesuchen. Mit DinoSim und DinoExplore wurden zwei interaktive Dino-Anwendungen für das naturkundliche Senckenberg Museum in Frankfurt entwickelt. DinoSim bietet eine interaktive Terminalanwendung, bei der sich Besucher in einer 3D Umgebung frei um Dinos bewegen können, ein Foto ihres T-Rex oder Diplodocus schießen können und das dann anschließend per Email zugeschickt bekommen. DinoExplore bietet eine 3D Emulation eines mobilen Suchspiels und wird im Download Bereich der Webseite des Senckenberg Museums angeboten.



Figure 1: Axel Feix at his talk about modelling and animation of Dinosaurs



Figure 2: Tyrannosaurus Rex in front of the Senckenberg museum/Frankfurt

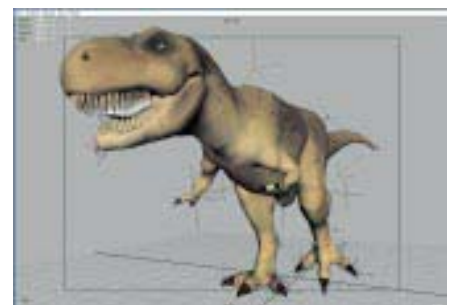


Figure 3: Screenshot of T-Rex in Maya modelling software

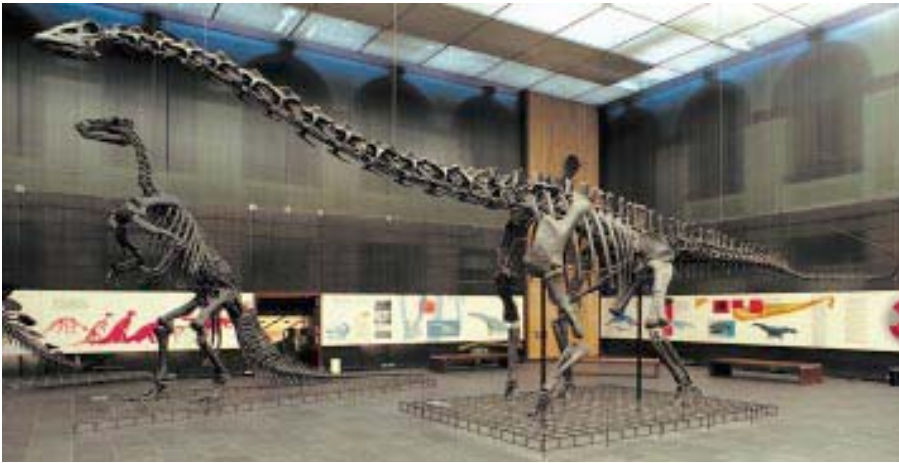


Figure 4: Lichthof hall at the Senckenberg museum

with DinoSim: After succeeding the logon process they can freely navigate within the 3D environment around the corresponding dinosaur and take their individual snapshot showing the Dino in a nice pose. This snapshot shall be sent to the email-address of the user also pointing out the »Foto Service« facilities of T-Online. DinoSim is presented at two of the four infoterminals within the dinosaur hall of the Senckenberg museum.

DinoExplore

This Dino Hunter application enables users to download a virtual model from the Senckenberg website and to start a virtual tour as preparation or postprocessing of a physical museum's visit. In order to increase immersion and motivation for the

usage of this application, Storytelling and Game based aspects are integrated. Thus, (virtual) visitors can use a (virtual) mobile device in form of a PDA, can walk around the museum, start a rallye and interactively explore the world of dinosaurs: Appearance and behaviour. Similar to DinoSim, different layers such as bones, skin and fur of the Dino models are integrated, as an interesting add-on, breathing of Dinosaurs is visualized to the user – this is a unique feature of the german museums and the research community in palaeontology.

In contrast to movie or TV productions on Dinosaurs, both DinoSim and DinoExplore are not focused on special effects but are based on numerous intensive and fruitful discussions between researchers of the Senckenberg museum and developers

at ZGDV Darmstadt. These applications have been successfully presented at the re-opening of the Senckenberg museum at November 6-8th in Frankfurt. Further details on the integrated concepts concerning the wide range of Dino Hunter applications are introduced in the report on the first workshop »m3I – museum as a 3rd learning place« within the events category of this topics issue.

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Figure 5: Klaus Milczewsky from T-Online at his statement



Figure 6: DinoSim fascinating young visitors at the re-opening ceremony at Senckenberg