

Project Portfolio

Greenpost GmbH

Company Profile	3
Augmented reality: VW press conference Geneva 2107	4
Augmented Reality: "Das Quiz für den Westen"	5
Interactive Systems: AudiCity	6
Installation: Luneta	7
Intergrated System: MFC65, KingPeter	8
Presentation: A5 launch	9
Interactive exhibits and Multitouch Presentation	10
Interactive Installation: Bayern Lounge	11
Cloud-based Application: Wilder Kaiser Video-Exchange	12
Stereoscopic Production Support	13
Stereoscopic rendering & mastering in 4K: Lichtmond	14
Stereoscopic conversion: KillBill 3D	15
RAW feature film workflows	16
Intergrated System: DasRekorder	17
Feature Film Documentary: 35Cows	18
Feature Film Documentary: Keep surfing	19
Classic Feature Film: The Rebel	20
Technical Animation: Voith & Frey	21
3D Animation	22
2D Animation: assorted	23

Geschäftsführer: Thomas Harbers, Frank Dornseifer info@greenpost.eu Tel.:+49 89 25549320 mobil:+49 177 6416572

Company Profile

This where Greenpost's Engineering-background kicks in. With roots in construction and engineering we can work with all kind of engineering data and turn it into nice looking interactive presentations.

Augmented reality: VW press conference Geneva 2107

CUSTOMER: Capture Media

SCOPE: Technical Supervision, Systems integration, Tracking, Content modification

Beginning 2017 Greenpost was approached by Capture Media to prepare a live augmented reality event for the press conference of VW at the Geneva automobile salon.

The target was to:

- Run 11 LED-walls with various resolutions up to 2,5K
- Track multiple cars on stage with millimeter accuracy
- Control and synchronize the main turntable on stage
- Control various Video mixers and crossbars
- Provide an Audio-server for multichannel audio
- Provide hot spares for all systems with automatic fallback upon failure

Although preparation phase was very short, Greenpost managed to build and configure the whole system in time.

This event was the starting point for a cooperation with capture media as their hardware and systems partner for the hard-to-do jobs.



Hauptniederlassung: Bahnhofstraße 23 57258 Freudenberg Zweigstelle München: Bavariafilmplatz 3 82031 Grünwald Geschäftsführer: Thomas Harbers, Frank Dornseifer

info@greenpost.eu Tel.:+49 89 25549320 mobil:+49 177 6416572

Augmented Reality: "Das Quiz für den Westen"

CUSTOMER: Capture Media / WDR

SCOPE: technical lead, tracking, augmented reality

Interactive Systems: AudiCity

CUSTOMER: RTT / Audi

SCOPE: Programming, system integration

Greenpost GmbH

Greenpost provided programming and system integration to ensure the successful creation and rollout of the first "Audi City" installations.

The first Flagship store to be equipped with this new and innovative concept was AudiCity London followed by the stores in Dubai and Beijing.

Greenpost was responsible for the programming of the "Powerwall", an interactive videowall where contents would



be triggered by an avatar on screen which moved according to the user in front of the screen.

One part was the interactive programming of the application itself but also all contents were controlled And partly ingested through a live connection to the global Audi Content database to provide (amongst others) daily updated prices and exhaust values.



Greenpost was also responsible to make sure all systems in AudiCity communicated in the right manner and thus ensured the overall functionality for each location. Depending on Installation size this included up to 80 different units like

- iPads
- Rendering Servers
- Video Servers
- Interactive terminals
- Videowalls
- Application workstations
- Video Crossbars



Installation: Luneta

Greenpost GmbH

CUSTOMER: Hewlett-Packard, Stiftung Zukunft Berlin

SCOPE: Programming, system integration, technical concept

2016 War die Stadt Breslau europäische Kulturhauptstadt. Anlässlich dieses Ereignisses und der der Städtefreundschaft Berlin-Breslau initiierte die Stiftung Zukunft Berlin das Projekt "Luneta". Der Name leitet sich vom Polnischen Wort für "Fernglas" ab und war quasi Programm für eine Multimediale Installation:



Sowohl in Berlin als auch in Breslau stand jeweils ein "Dome", der einen Tunnel aus Monitoren enthielt, die ein live-Panorama der jeweils anderen Stadt zeigten. Ging man also in den Dome in Berlin hinein stand man quasi im Dome in Breslau und sah live, was sich um den dortigen Dome so abspielte.





An der Kopfseite des Monitortunnels gab es eine interaktive Projektion durch die man live mit Besuchern in der anderen Location kommunizieren konnte, quasi eine Videokonferenz.

Durch einen Touchscreen hatte man die Möglichkeit Botschaften zur anderen Location zu schicken.

Für diese Installation entwickelte Greenpost eine spezielle Streaming Software, die das live-**Panorama** Kameras zusammensetze, über das Internet übertrug und in der anderen Location wieder korrekt um es dann entzerrte 60 Monitoren insgesamt darzustellen.



Die technische Besonderheit war, dass das gesamte System auf virtuellen Server von HP lief, dem Hauptsponsor dieser Installation.

Intergrated System: MFC65, KingPeter

CUSTOMER: Praezisions-Entwicklung Denz

Greenpost GmbH

SCOPE: System integration, technical concept, programming

Denz is a manufacturer of high-end equipment for the feature film industry and known worldwide for the uncompromising quality of their products.

Being a traditional manufacturing company, Denz teamed up with Greenpost to create some new products that combined high precision, 50 years of experience in the feature film industry and modern electronics and software into new products.

Coming from an engineering background and having more than 15 years of experience in the feature film and camera technology, Greenpost was the ideal partner for Denz.

This cooperation yielded two products so far: "KingPeter" and "MFC65".

Both products are gauges to measure the optical system of a camera. KingPeter measures the offset, tilt and pan of a digital camera chip in relation to the lens mount. MFC65 enables

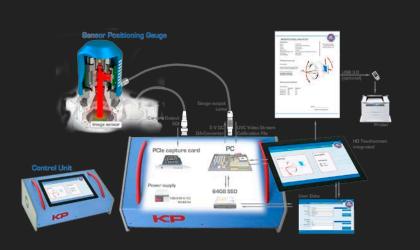


users to check the lens itself for offset back focus, optical distortions or zoom-smoothness.

For both products Greenpost developed the overall system architecture, selected the components to be used and designed all Software from Operating systems to UI.

Greenpost also built hardware prototypes and helped to refine measurement technology to ensure the high quality Denz is standing for.

Software development also included code for pattern recognition and image analysis which made up the "secret sauce" of the KingPeter. The MFC65 includes an Android tablet to completely remote control the projector.







Hauptniederlassung: Bahnhofstraße 23 57258 Freudenberg Zweigstelle München: Bavariafilmplatz 3 82031 Grünwald Geschäftsführer: Thomas Harbers, Frank Dornseifer info@greenpost.eu Tel.:+49 89 25549320 mobil:+49 177 6416572

Presentation: A5 launch

CUSTOMER: Capture Media / Audi

SCOPE: Technical lead, programming, systems integration

Interactive exhibits and Multitouch Presentation

CUSTOMER: undisclosed, Stereolize

Greenpost GmbH

SCOPE: interactive programming, systems integration, content generation

Greenpost created multiple Multitouch-Presentations for Exhibitions and trade shows. All our solutions are always highly customized and tailored to the customer's needs.



Greenpost provides the content as well as the interactive Programming and the hardware everything runs on. By offering the full package out of one hand we can ensure everything works perfectly together as it should and all content is presented in the best manner.

Especially Realtime 3D content

has to be prepared in the right manner so large datasets still can be displayed and interacted with in a fluent manner with optimum rendering quality.

Together with our many cooperation partners we can make any content come to life and will make sure it is presented in the right manner.

No matter what the topic, we can develop content, design and interaction concepts tailored to any topic you might bring up.

Weltti

We can custom build exhibition furniture to house all the high-tech components needed for a cutting-edge presentation. At the same time, we will make sure all equipment and furniture fits right into your booth environment. The ideal combination of style, function and interactivity.





Interactive Installation: Bayern Lounge

CUSTOMER: Stereolize / Tourismus Bayern

Greenpost GmbH

SCOPE: interactive programming, Systems integration, installation support

For the Bavarian tourist agency Stereolize created an interactive application that showcases various towns, landscapes and historic buildings in Bavaria.

The project started out as an installation for a trade show and was later on installed permanently at the Munich airport as the "Bayern Lounge".



The Bayern lounge hosts 2 touchscreen tables and a monitor-wall (4x 55" in a row).



Greenpost was responsible for the interactive programming of the touchscreen app and the complete system setup at the Munich airport.

A special challenge in this case was to comply with all rules and peculiarities of an installation at an airport.

Also the system had to be built for unsupervised 24/7 performance.

The system included the following services:

- Setup and installation of 3 servers on site.
- Setup for complete remote administration of all components.
- Remote controlled switches for all monitors and computers
- Central control server to supervise server performance and alert system
- Content distribution service to automatically update content on remote machines
- Support and maintenance of the whole system for three years.



Cloud-based Application: Wilder Kaiser Video-Exchange

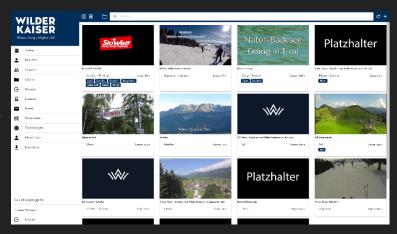
CUSTOMER: Wilder Kaiser

Greenpost GmbH

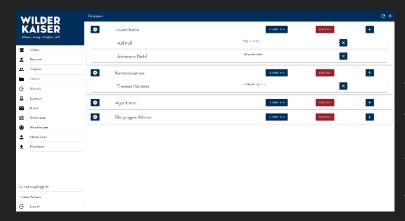
SCOPE: Programming

The tourist authority of the "wilder Kaiser" area in Austria wanted an online platform to make their marketing material available to videographers, agencies, television studios and the likes.

For this purpose, Greenpost developed a complete cloud-based web application for uploading and managing media files. The server automatically generates thumbnail previews of uploaded video files and offers basic Metadata for all clips. All clips can be tagged and grouped into folders for comfortable browsing.



The database handles an unlimited number of use who can be assigned several roles and permissions for the various features of the site.

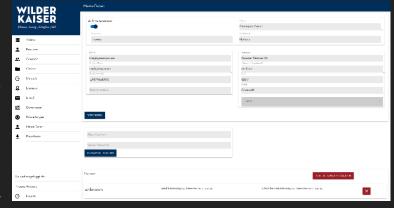


Each uploaded Media file has its own License attached and is controllable by the uploader. Access to a file can be limited to certain users or groups of users. The uploader can choose between site licenses offered by the site Administrator or enter own Licenses through a WYSIWYG-Editor.

That same editor can be used to send Email to selected users or user-groups.

The whole Site is based on the Microsoft AZURE cloud and is therefore fully scalable concerning server performance and storage size. On site setup a global location can be chosen to host all files.

The Database is able to handle multiple clients and can be rented on a monthly base at mediastack.cloud.



Stereoscopic Production Support

CUSTOMERS: Lilliwood, Wim Wenders, FIAT

SCOPE: Technical workflow, on set support, 3D postproduction

Greenpost was one of the first companies in Europe to pioneer stereoscopic Film/Video production technology. Using Raw-cameras like the SI2K and RED cameras along with the in House developed stereoscopic recording system "DasRekorder" Greenpost had all technologies for 3D movie/video acquisition long before they were available on the market.

Using custom built tools and software from 3D and RAW pioneering company IRIDAS Greenpost offers full production support from Acquisition to Mastering on DVD/Blu-ray and DCP, in 2D and 3D.

Stereoscopic rendering & mastering in 4K: Lichtmond

CUSTOMER: Silicon Philosophies / Lichtmond

SCOPE: Rendering, 3D Mastering, Presentation technology

Stereoscopic conversion: KillBill 3D

CUSTOMER: internal

Greenpost GmbH

SCOPE: 3D-conversion, 3D-DCP Mastering, 3D Bluray-Mastering

Beginning of 2012 was the dawn of the new 3D feature film era and Greenpost was deeply into stereoscopic production. Apart from real stereoscopic productions with two shooting cameras, there was a lot of traditional 2D material around that just waited to be remarketed in 3D.

For this 2D Material has to be converted to 3D by generating a second version of the film mimicking a slightly different angle of view of a virtual second camera.

There are several methods to do this ranging from purely automated software solutions to full CGI reconstruction of a scene in a movie. The first one being the cheapest, quick&dirty solution and that latter one being the most expensive but delivering ultimate quality and flexibility.

That's the reason why mainstream feature films would cost tens of millions to convert, but not all movies had that budget. So Greenpost came up with a conversion method that combined 4 different technologies into a "budget driven quality"-approach for 3D conversion.

Because not all scenes in a movie need full CGI reconstruction and not all scenes work well with a certain conversion method. The key is to choose the right technology for each shot in the movie and combine everything into a quite pleasant presentation but staying within a limited budget.

Because 3D cinema is more than "just adding a second camera" a lot of knowledge and experience is needed to keep Budget, quality and viewer comfort in balance.

RAW feature film workflows

CUSTOMER: Boogiefilm, Stromberg Productions

SCOPE: Complete production support, Postproduction, Mastering, print to film

When digital cinema cameras came to existence in 2007/2008 Greenpost was one of the first companies to pioneer digital RAW Postproduction workflows.

Greenpost GmbH

The new technology enabled Filmmakers to shoot with directly to Harddisk or Memory cards without going through the very expensive Process of developing and digitizing classic 35mm film. While other cameras were already able to do this, they



all recorded compressed material, compromising image quality. Digital RAW offered the full dynamic range of 35mm, IF treated properly throughout the whole postproduction workflow.

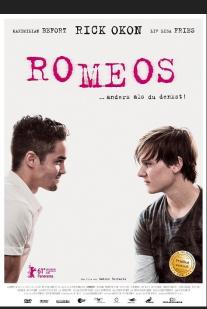


One of the first ever movies to be shot completely in digital RAW was "The eagle Hunter's son" that premiered at the Berlinale film Festival in 2009. It was entirely shot on an SI2K-camera, the very first uncompressed RAW digital camera used in feature film and Greenpost was the only one at that time taking the challenge of handling the complete workflow from RAW-files to the 35mm print.

Another pure RAW cinema production was "Romeos", a film by Sabine Bernardi.

For this film Greenpost provided the whole workflow and Equipment:

- An SI2K-camera with custom built recorder
- DIT on set
- Editing suite
- compositing
- Raw colour grading in 2K
- Print to 35mm film
- Mastering of DCP



Intergrated System: DasRekorder

CUSTOMER: own product

Greenpost GmbH

SCOPE: technical concept, systems integration, programming, prototype construction



When 3D-cinema started to return to the feature film market, There was a lack of Systems that were able to record stereoscopic digital cinema images.

As Greenpost always was right at the cutting edge of technology, we began to develop our own line of stereoscopic recorders called "DasRekorder".

There were several versions of the recorder tailored for special uses.

One version was an ultra portable and rugged monoscopic recorder that was used to be carried by a stunt-camera-man for a television show. The recorder was mounted to a stunt-vest and the actual camera was a handheld camera head. The preview monitor was mounted on the front of a protective helmet.



Another version of the recorder was able to run on 10 Liters of Ethanol for about 3 weeks. It was setup far up in a mountain to record sensitive wildlife, emitting nothing but pure water and oxygen and being completely silent. The recorder was controlled from the valley at a distance of over 5 kilometers.

A third version was capable of recording 2 streams of uncompressed RAW at 2K with up to 720 fps. DasRekorder can be adapted to nearly any usage-scenario for any project.

Feature Film Documentary: 35Cows

CUSTOMER: Ossie von Richthoven / Roland Emmerich

SCOPE: Complete Postproduction, Mastering (DCP, Bluray, DVD)

In 2009 Greenpost was approached by Oswald von Richthoven (formerly GAP productions)

for support on a documentary project that turned out to be one of the longest running cooperations for Greenpost. The feature film documentary "35 cows and a Kalashnikov" was over 5 years in the making combining several data formats from several film shoots throughout the whole period.

Greenpost GmbH





The outcome was a rather unusual documentary about the African continent with three insights into local subcultures.

Greenpost was responsible for conforming, color grading and mastering the movie with all its different image formats and technical shortcomings, combining it into a seamless

theatrical experience that deserved to run in cinemas.

This movie also marked the end of the life of its director Oswald von Richthoven, who died of lung cancer one day after the last puzzle piece of the movie was finished: the official movie poster.



Feature Film Documentary: Keep surfing

CUSTOMER: pipelinepictures, MDTS

SCOPE: Complete Postproduction, Mastering (DCP, Bluray, DVD, Print to film)

Classic Feature Film: The Rebel

CUSTOMER: Chanh Phuong Phim

SCOPE: Complete postproduction workflow, compositing, print to film, DCP mastering

Technical Animation: Voith & Frey

CUSTOMER: Voith, Frey

SCOPE: Technical visualization, interactive programming, rendering



Hauptniederlassung: Bahnhofstraße 23 57258 Freudenberg Zweigstelle München: Bavariafilmplatz 3 82031 Grünwald Geschäftsführer: Thomas Harbers, Frank Dornseifer info@greenpost.eu Tel.:+49 89 25549320 mobil:+49 177 6416572

3D Animation

CUSTOMERS: several

SCOPE: Technical animation, rendering



Hauptniederlassung: Bahnhofstraße 23 57258 Freudenberg Zweigstelle München: Bavariafilmplatz 3 82031 Grünwald Geschäftsführer: Thomas Harbers, Frank Dornseifer info@greenpost.eu Tel.: +49 89 25549320 mobil: +49 177 6416572

2D Animation: assorted

CUSTOMER: EDEKA, BR

SCOPE: content generation, compositing, programming