

### (RIGGING AND DYNAMICS ARTIST)

*Harald Zlattinger*

Urstein Süd 3 U101  
A-5412 Puch

+43 (0) 650 / 555 6 999  
spy@pyralab.com  
www.pyralab.com

## ■ MICROCOSM

### SHORT DESCRIPTION

Microcosm is an animation which shows the hidden world of the microcosm. This project was done as a semester project for the course 3D-Advanced at the University of applied sciences Salzburg – MultiMediaArt (FH Salzburg).

### PROJECT TASKS

all done by myself including audio and compositing

### MAIN FOCUS

learning different techniques of modeling, shading, texturing, lighting, dynamic simulations and compositing.

## ■ DESTROYING SIGHTS – DENKMAL

### SHORT DESCRIPTION

For the stagemow-projections of a new coverband, the song "Wir waren Helden – Denkmal". was needed to be visualized. Three famous sights are displayed one after another. When the hammer hits the anvil, the sight explodes with a particle effect.

- › short sequence of one sight being destroyed
- › screen capture of the image plane emitting particles

### PROJECT TASKS

- › Particle Expressions
- › Control for Sight-ID
- › Shading sights and hammer + anvil
- › Modelling of Hammer and Anvil
- › Animating
- › Compositing

### MAIN FOCUS

Creating a dynamic particle system where the emission rate and the particle color is taken from an image. Also making the particles emitting from the image plane look 3-dimensional by adding turbulence and air-fields to push the particles in z-direction

### TECHNICAL INFORMATION

The Models were taken from turbosquid and shaded by myself. I positioned a camera and rendered each of the sights a frame before the explosion. An image plane aiming at the camera with a shader controlled by an interface-item is emitting particles referring to the images (color-channel and alpha-channel of the rendering). Several fields like gravity, radial fields, newton fields are pushing the particles realistically like shards of an explosion.

### ■ ROBOT ARM

#### SHORT DESCRIPTION

The robot arm was created for training connections and bone- and constraints-hierarchy.

- › screen capture of using the robot arm

#### PROJECT TASKS

All was done by myself

#### MAIN FOCUS

Achieving an easy to animate robot arm where locators and controls are easy to use and only a few values have to be changed. Rotation of the main arm and aiming of the base is fully automatic.

#### TECHNICAL INFORMATION

Bones and Constraints were used to make the base rotate with the locators avoiding flipping and distortion. Only the 2 locators have to be used to move the arm to the desired position by encapsulated groups containing the ik-handle and several connections, constraints and expressions.

### ■ AIR GUITAR GIRLIE

#### SHORT DESCRIPTION

For the stagemow projections my team needed an air guitar animation with a little girl who shows the audience how to do airguitar and to motivate them to join the contest.

- › screencapture of using the control rig
- › rendered sequence showing the animation-possibilities.

#### PROJECT TASKS

- › Rigging
- › Easy to use controls for blendshapes and different joint-rotations to make the rig simple

#### MAIN FOCUS

Creating an easy to use character rig with several additional channels to control finger movements, leg transforms, blendshape control and eye-direction

### ■ DARK ANGEL FOR 'RAMMSTEIN – ENGEL'

#### SHORT DESCRIPTION

For the stagemovie projections the song Rammstein – Engel had to be supported by animation sequences. Therefore an angel was created which isn't a typical angel but more a dark angel which isn't able to fly and getting angry.

- › screen capture of using the wing-controller and the blendshapes
- › short sequence of the rendered animation

#### PROJECT TASKS

- › Rigging
- › Easy to use controls for blendshapes and different joint-rotations like the wing-control to make the rig simple.

#### MAIN FOCUS

Creating an easy to use character rig with several additional channels to control finger movements, leg transforms, wing control, blendshape control and eye-direction

### ■ VIDEO KILLED THE RADIO STAR

#### SHORT DESCRIPTION

A TV-set and an old radio dance together in the song "Video killed the radio star" in the stagemovie projection. The characters deform in cartoon style and even if they are only objects they seem to live.

- › screen capture of using the control rig of the radio
- › screen capture of using the control rig of the TV-set
- › short sequences of the rendered animation

#### PROJECT TASKS

- › Character rigging only by deformers
- › creating an easy to access interface for animation
- › making the characters deform like toon characters
- › creating blendshapes

#### MAIN FOCUS

The characters had to deform like toon characters and the control interface should gain access to all important controls to make it easy for the animator to deform the characters. Also blendshapes had to be created to give the animator the chance to create a few facial expressions by eyebrow movement

### ■ MAYA FUR

#### SHORT DESCRIPTION

In 3D-Masters course at FH Salzburg we had to create a good looking fur using Maya Fur.

- › rendered sequence of the fur which is controlled via several expressions

#### PROJECT TASKS

All done by myself

#### MAIN FOCUS

Creating a fur on an object which looks fluffy and can be controlled and animated with expressions.

### ■ THE BIG WHEEL

#### SHORT DESCRIPTION

For the short movie "Microcosm" a big wheel was needed which can carry a marble and drops it at the bottom by rigid body solutions with several constraints and fields.

- › screen capture of the rotating big wheel.

#### PROJECT TASKS

- › Modelling
- › Rigid Body Simulation
- › Constraints
- › Forces and Fields

#### MAIN FOCUS

Creating a realistic behaving big wheel to use in the move "Microcosm" which makes the animation calculated by the program. Only one value has to be animated – the rotation of the big wheel

### ■ VECTOR EXPRESSIONS

#### SHORT DESCRIPTION

When driving a wheel the rotation of the wheel and the translation have to be mathematically calculated to make the wheel spin realistically. I created an expression where you only have to translate the system and the rotation of the wheels is calculated by the driven distance.

- › screencapture of the wheel system animated along a motion path

#### PROJECT TASKS

Creating the vector expression for wheel rotation calculation in every direction

#### MAIN FOCUS

Creating realistic wheel spin without having to care about moving the system only in one direction but being able to use every rotation and translation axis.

### ■ LIKE A PILL

#### SHORT DESCRIPTION

For the song "Pink – Like a pill" for the stagemash projection several sequences were needed.

- › rendering of one sequence where pills fall down on a surface.

#### PROJECT TASKS

- › Rigid Body Simulation
- › Shading
- › Rendering

#### MAIN FOCUS

- › Making the collisions of several objects look realistically without having to animate them by hand.
- › A controller is used to change the maximum random initial settings for the rigid bodies.

### ■ SOFTWARE USED FOR THE SHOWREEL

- › Autodesk Maya 8.0/8.5
- › Adobe Photoshop
- › Adobe Illustrator
- › Pixologic zBrush 2
- › Adobe Premiere 2
- › Adobe After Effects 7
- › Steinberg Cubase SX 3
- › Steinberg Wavelab 5
- › ...