

Walter Behrnes

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Passionate, success driven senior developer / effects technical director with over 15 years of experience who is skilled in managing and mentoring junior team members. Adapt in all phases of the software development lifecycle, skilled in front-end as well as back-end web based architecture using PHP, Java, Python, JavaScript and other languages. Proficient in developing programming standards and documentation creation.

Programming Experience:

Bash, C++, C#, CSS, GIT, HTML, HTML5, jQuery, JSON, Java, JavaScript, MongoDB, MySQL, Objective-C, PHP, Python, SVN, VB, ZODB

Software Experience:

After Effects, Avid, Blender, Excel, Houdini, Microsoft Word, Maya, Modo, MudBox, Nuke, Photoshop, UV Layout, XSI, ZBrush

Work Experience

House Special	Senior TD / Software Developer / Effects Artist	Jan 2015 – Dec 2017
Reel FX	Senior Houdini Developer	Nov 2013 – Jan 2015
Reel FX	Effects Supervisor	Sept 2007 – Nov 2013
Post Asylum	VFX Supervisor	Aug 2006 – Sept 2007
Tippett Studio	Creature Modeler	June 2006 – Aug 2006
DNA Productions	Lead Technical Director	June 2004 – June 2006
Bowling Green State University	Assistant Professor	Jan 2002 – May 2004

Education

2000 - 2002

M.F.A., Digital Arts Bowling Green State University

1999 - 2000

B.F.A., Computer Arts Bowling Green State University

1995 - 1998

Louisiana State University

Job Break Down: Walter Behrnes

House Special

Senior TD / Software Developer / Senior FX Artist

Jan 2015 – Present

Software: Houdini, Maya, Nuke, Real Flow

Responsibilities:

- Development of new VR pipeline (From the ground up)
- Development of Parallel Effects pipeline to update existing pipeline.
- Lead Shows
- FX Shot Creation

Modules Created:

- DB Module.
Module used to communicate with Shotgun. Used by Maya, Houdini, Nuke.
- Qube Module.
Module which ties into the Qube API allowing for farm submissions from Houdini, Nuke, Realflow
- Path Library.
Pathing library used to dynamically construct pipeline paths. This was developed to remove hard coding of paths from code.
- Global Module.
Module used to configure and return global pipeline data.
- Environment and Shell module.
Modules used to for configuring shell and applications environments used by application launching system.

Tools Created:

- Application tracking and management system
Developed system to easily track and upgrade working applications and plugins
- Task Browser
Modern task based shot browser. Allows artist to create, track, launch, reconfigure working tasks.
- Assembly Database and command line browser
Object based database with Command line browser to navigate shot databases
- Houdini FX shot publisher
System for tracking and publishing FX tasks work to Maya.
- Maya Scene Description Publisher
Facilitated extracting scene data from Maya to make duplicate scenes in Houdini for FX shot work.
- Houdini Caching system.
System for caching and managing cache in Houdini
- Houdini Set Dressing toolset
Toolset for procedural set dressing in Houdini
- Houdini Grass Toolset.
Custom procedural grass creation toolset in Houdini
- Tied Nuke into updated pipeline.
- Modeling, Rigging, Animation publishing systems for VR pipeline.

Software: Houdini, Maya

Responsibilities:

Focused development in relation to all aspects of Houdini based pipeline. Effects shot work support.

Tibetan Rock Dog (2014 – 2015)

Responsibilities:

- Refactoring Houdini tool sets to work with Arnold Renderer
- Technical support for procedural set dressing team.
- General support related to Houdini based issues.
- effects shot work.

Book Of Life (2013 - 2014)

Responsibilities:

- Development and maintenance of asset accessory system
Toolset for building and dynamically deploying mass populated assets into lit scenes.
- Development and maintenance of automatic culling system for set and accessories.
Dynamic culling system used to creating render bundles and setting lod levels for Set based assets in relation to distance from camera and frustum visibility.
- Technical support for procedural set dressing team.
- Helping debug problematic lighting shots.
- General support related to Houdini based issues.
Specifically scene build and rendering issues.
- Helped with effects shot work near the end of the production schedule.

Tools Created:

- Asset LOD.
Node based tool for visualizing and setting lods of set based assets in scene.
- Asset Grouper.
node based tool for quickly generating render bundles of set assets based on camera frustum.
- Asset Reduce.
Node based tool for visualizing and nondestructively reducing visible set based assets.
- Accessory Reduce.
node based tool for quickly reducing dynamically populated accessory system.
- Scene Data node.
Node based tool for quick automation of tools listed above.
- Set Dress Accessories.
Developed and maintained method for creating, populating, and caching of set accessories.
*Accessories in this instance are any assets which are mass populated.
- FX Accessory wrapper.
Developed toolset for wrapping FX elements into accessories to facilitate easy delivery to lighting department.

Software: Houdini, Maya, Nuke

Responsibilities:

Building, maintaining, and managing department, training new department employees, developing and optimizing production toolsets, developing departmental pipeline tools, and shot production.

Free Birds (2013)

Responsibilities:

- Supervision of effects.
- Technical support and development of tree / bush creation and animation toolset for vegetation team.
- Shot production.

Tools Created:

- PyQt Cache management tool (python) (command line)
- PyQt rat to dtex conversion tool. (python) (command line)
- Render range and image verification tool(python) (command line)
- Toolbar Machine independent copy paste tool. (python) (Houdini)
Allows artist to send Ctrl-C info to another artist to CTRL-V into their scene.
- Toolbar based, cache path management. (python) (Houdini)
Allowed artist to quickly get formatted render and cache paths for Nuke.
- Toolbar based, Qube render jobs analyzer(Python) (Houdini)
- Converted previously written fur exported from python to C++
- Custom fur importer C++

Despicable Me Minion Mayhem (2012)

Responsibilities:

- Supervision of effects (start and end of production).
- Further development and support of crowd simulation toolset in Houdini (Python backend)
- Shot production

Humbugged: Rockettes to the Rescue (2011)

Responsibilities:

- Supervision of effects.
- Further development of crowd simulation toolset in Houdini (Python backend)
- Development of tree creation and population toolset.
- Various shot production.

Ice Age Christmas Special (2011)

Responsibilities:

- Supervision of effects.
- Development of a crowd simulation toolset and workflow in Houdini.(Python backend)
- Oversight of tools for generating effects (Blizzards, foot prints, clouds, fog, atmospheric effects.)
- Training new departmental employees.
- Shot production.

Judy Moody and the Not Bummer Summer (2011)

Responsibilities:

- Supervision of snow, waterfall, and dust effects.
- Further development and refinement of custom in house grass and procedural set population tools.
- Shot production.

Looney Toons Shorts (2010 - 2011)

Requiem For A Hunt, I Tawt I Taw a Puddy Tat, Fur of Flying, Rapid Rider, Coyote Falls

Responsibilities:

- Supervision of effects for each short.
- Designed, created, and utilized tools for Road Runner smoke trail, Missile Smoke, Segway, shotgun blast smoke, confetti, and glitter effects.
- Shot production.

Tools Created:

- Houdini to Maya: Custom rib format exporter.(Python)
- Houdini to Maya: Custom point cloud exporter (Python)

Open Season 3 (2010)

Responsibilities:

- Supervision of Effects.
- Further development and refinement of in house grass system and procedural set population tools.
- Environment TD
- Shot production.

Spy Next Door (2010)

Responsibilities:

- Supervision and creation of effects for project.
- Developed, propagate and utilize a work flow to produce needed effects.

Ferrari Dark Ride - Theme ride in Dubai (2010)

Responsibilities:

- Supervision and creation of effects and environments for show.
- Integration of Houdini into pipeline.
- Procedural creation of Daytona speed way.
- Environment Td

Tools Created:

- **Grass Tool** : used to procedurally populate environment with grass .(Houdini)
- Grass exporter /Importer (Houdini) (Python) / (Maya)(Mel)
- **Terrain Tool** : Procedurally populate environments with existing elements such as trees.(Houdini)
- Terrain exporter(Houdini)(Python)
- **Rock and Wood Fence Tool**: Procedurally generate rock fences and wooden fences.(Houdini)

Tales of the Black Freighter (2009)

Responsibilities:

- Supervision and creation of effects and Water for show.
- Created water for opening credits and embers though out film.

Tools Created:

- **Ocean Tool**: Supervised and co-created ocean tool to match already existing hand drawn water.

Journey to the Center of the Barnett Shale (2008)

Responsibilities:

- Supervision of effects.
- Development and creation of effects.
- Development and creation of environmental tools.
- Pipeline development to further integrate Houdini into pipeline.

Tools Created:

- **Grass Tool**: Further development of grass tool. Added enhancements in for visualization.
- **Parallax Tool**: co-Created this tool. Used to propagate user defined images onto parallax planes.
- **Fern Tool**: Developed to create procedural ferns high resolution and low resolution.
- **Terrain Tool**: Updated terrain tool to handle more robust population of environments.

Open Season 2 (2008)

Responsibilities:

- Creation of all environment tools / set dressing of film using tools created.
- Created all trees, bushes, and grass for film.
- Supervision and creation effects for film. (Second half of film)

Tools Created:

- **Terrain Population Tool (Mel):** used to procedurally modify and populate environmental assets such as flower, and weeds.
- **Grass population Tool (Mel):** Used to automate shave to quickly paint the ground plane and have grass grow from that area.
- **Gobo tool (Mel):** Visualization tool for lighters to position and see where their gobos casted shadows in scene.
- **Electricity Tool (Mel):** Automates and creates electric effect that sticks to characters.
- **Fly Swarming Tool (Mel):** Created effects system that would make flies swarm around a given character.

Post Asylum

Visual Effects Supervisor

Aug2006 – Sept 2007

Software: Houdini, XSI, Photoshop, body Paint, After Effects

Responsibilities:

Building and managing 3d department, art directing projects, creation of internal database driven website, budgeting hours for project completion on 3d and 2d projects, working closely with clients to bring their vision to reality, and hands on working to complete projects(all aspects of live action and 3d animation).

Commercial Projects:

Time Warner, Papa John's Pizza, Harrah's, Dairy Queen, Heeleys, and Cadbury Schweppes.

Tools Created:

I wrote an in-house web based project management system (PHP). This system tracked hours, tasks, generated reports.

Tippett Studio

Creature Modeler

Jun 2006 – Aug 2006

Software: Maya, MudBox, Cyslice, UVLayout

The Spiderwick Chronicles (2006)

Responsibilities:

Creature Modeling, Displacement Painting, UV layout, Blend Shape Creation, occasional script writing.

DNA Productions

Lead Technical Director (Environments)

Jun 2004 – Jun 2006

Software: Houdini ,Maya, ZBrush, XSI

The Ant Bully (2006)

Responsibilities:

Procedural Modeling:

Building, maintaining, teaching procedural environmental tools in Houdini. (Grass, ground, shrubbery, etc.). Insured tools worked with all aspects of the pipeline. Concurrently work with massive and effects team. My duties include developing OTLs and scripts to help integrate Massive data into the Houdini to integrating the procedural grass tools dynamically interact with characters.

Pipeline tool development: (Perl, bash, cmd)

Construction of tools to automate workflows, save disk space, gather geometry lists, and reduce geometry size.

Prop Rigging: (Hscript, Mel)

Creation of prop rigs / layout rigs for animators and dress out artist. Training of artist on rig usage. Trained other members of my team in set rigging. Checked all set rigs coming out of department.

Modeling:

Building of organic and hard surface models. Occasional UV and ZBrush work. Script writing to help speed up modelers work flow.

Bowling Green State Univ.

Assistant Professor

May 2002 - Jan 2004

Software: Maya, Photoshop, Flash, After Effects.

Responsibilities:

Full teaching responsibility, creation of syllabus and defining and implementing course objectives.

Spring 2004

ArtC 413 - Advanced Computer Animation (two sections)

ArtC 312 - Intermediate computer animation

ArtC 311 – Advanced Flash Programming

Fall 2003

ArtC 413 - Advanced Computer Animation

ArtC 321 - Intermediate digital imaging

ArtC 311 - Intermediate 3d modeling

Summer 2003

ArtC 400 – Creative Mel Scripting in Maya

Spring 2003

ArtC 413 - Advanced Computer Animation

ArtC 312 - Intermediate Computer Animation (**two sections**)

Fall 2002

ArtC 201 - Introduction to Computer Art

ArtC 311 - Intermediate 3d Modeling

ArtC 331 - Intermediate Interactive Art

Bowling Green State Univ.

Graduate Student Teacher

Jan. 2001 - May 2002

Responsibilities:

Full teaching responsibility, creation of syllabus and defining and implementing course objectives.

Spring 2002

ArtC 413 Sections 1 & 2 - Adv. Animation.

Fall 2001

ArtC 413 - Adv. Animation.

Spring 2001

ArtC 391 - Maya Modeling and Animation.

Bowling Green State Univ.

Graduate Teachers Assistant

Sept. 2000 - Dec. 2000

Responsibilities:

Partial teaching responsibility including grading and instruction.

Fall 2000

Computer Art 491 - Advanced Animation.

Behrnes, LLC

Founder/Owner/LLC Member

2012 - 2015

Behrnes, LLC is Spice Company I founded which sales Spice Mixtures to the public and wholesale.

Apart from running the business I also wrote and managed the Front-End and Back-End of the company's website using PHP, JavaScript, MySQL. The web interface managed buyers' orders, generated excel and pdf sales documents and end of year tax reports.

BlueMunster, LLC

Founder/Owner/LLC Member

2008 - 2013

BlueMunster, LLC is a company I founded in 2008 to peruse my love of coding mobile applications. The applications I wrote are in Java for android and Objective-C. I used a variety of 3d packages, Photoshop, and hand draw images to create the graphics for the games that I create.

Published iPhone games:

Munster Matcher, Munster Matcher 2d

Published Android games:

Munster Matcher, Symbol, Ah! Slugs

Published Work

Artwork displayed in Core Concepts in Art CDROMs in the following books:

- Gilbert's Living with Art, Sixth Edition, by Mark Getlein
- Art across Time, Second Edition, by Laurie Schneider Adams
- Art Fundamentals, Ninth Edition, by Otto Ocvirk et al.
- Interiors, Third Edition, by Karla Nielson and David Taylor
- Launching the Imagination, by Mary Stewart
- A History of Western Art, by Laurie Schneider Adams

Digital Productions Magazine 2005

- Authored Modeling a windmill in Maya
- Contributed art work for examples in several other articles.

Exhibitions | Shows | Awards

- Solo Painting Show, Grendel's, Portland Oregon September-October 2017
- "What's So Funny?", Gallery Project, Ann Arbor Michigan, October 2010
- Guest artist and lecturer (digital arts) 100th birthday of Bowling Green State University Art Show. September 2010
- Contributing Artist for Live Draw, Dallas , Texas March 2007
- One person show, Cosmos, Bowling Green, Ohio, February - March 2003
- Immedia 2003, February 2003
- Two person show, Cosmos, Bowling Green, Ohio, November - December 2002
- Taking Back Toledo, Invitational Group Show Space 237, June 2002
- Certificate of Recognition for Outstanding Graduate Student Teaching Assistant Award, April 2002
- MFA Thesis Exhibition, BGSU, March 2002
- Immedia 2002 the senses, February 2002
- Kota Press - Gold Award, February 2002
- Siggraph, Space 2001
- Summer Work, BGSU, Summer 2000
- BFA Exhibit, BGSU, Spring 2000